TOSHIBA

FILE NO. 040-9818

SERVICE MANUAL

COLOUR TELEVISION

S8SS Chassis

50G9UXE, 50G9UXH

50G9UXM, 50G9UXA

61G9UXE, 61G9UXH

61G9UXM, 61G9UXA

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TABLE OF CONTENTS

CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS 3
CRT ASSEMBLY REPLACEMENT AND MOUNTING 4
PICTURE TUBE COMPONENTS ADJUSTMENT 6
SERVICE POSITION 9
SERVICE MODE 10
DESIGN MODE 13
ELECTRICAL ADJUSTMENT 14
CONVERGENCE ADJUSTMENT 20
SCREEN AND MIRROR ALIGNMENTS 26
CIRCUIT CHECKS 27

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA 28
LOCATION OF CONTROLS 29
PROGRAMMING CHANNEL MEMORY 31
CIRCUIT BLOCK DIAGRAM 33
MECHANICAL DISASSEMBLY AND CABINET REPLACEMENT PARTS LIST 35
CHASSIS REPLACEMENT PARTS LIST 39
PC BOARDS BOTTOM VIEW 57
TERMINAL VIEW OF TRANSISTORS 69
SPECIFICATIONS 73
APPENDIX:
CIRCUIT DIAGRAM

CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a (C) V AC power source. The high voltage must not, under any circumstances, exceed (B) kV.

   Refer to table 1 for high voltage (A), (B) & AC voltage (C). (See SETTING & ADJUSTING DATA on page 28)

   Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
3. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

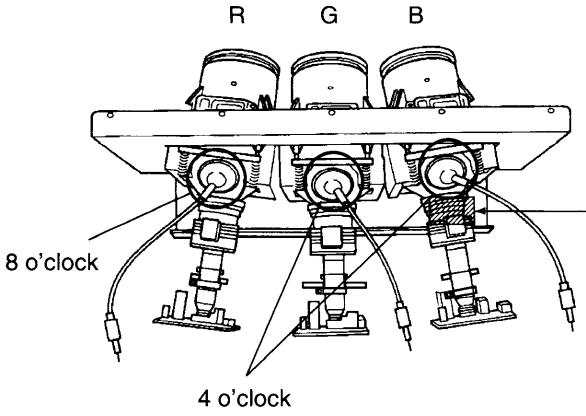
1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; nonmetallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.

PRODUCT SAFETY NOTICE

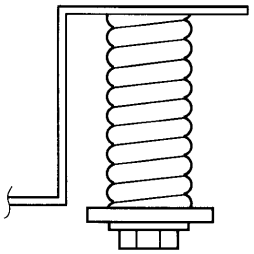
Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

CRT ASSEMBLY REPLACEMENT AND MOUNTING

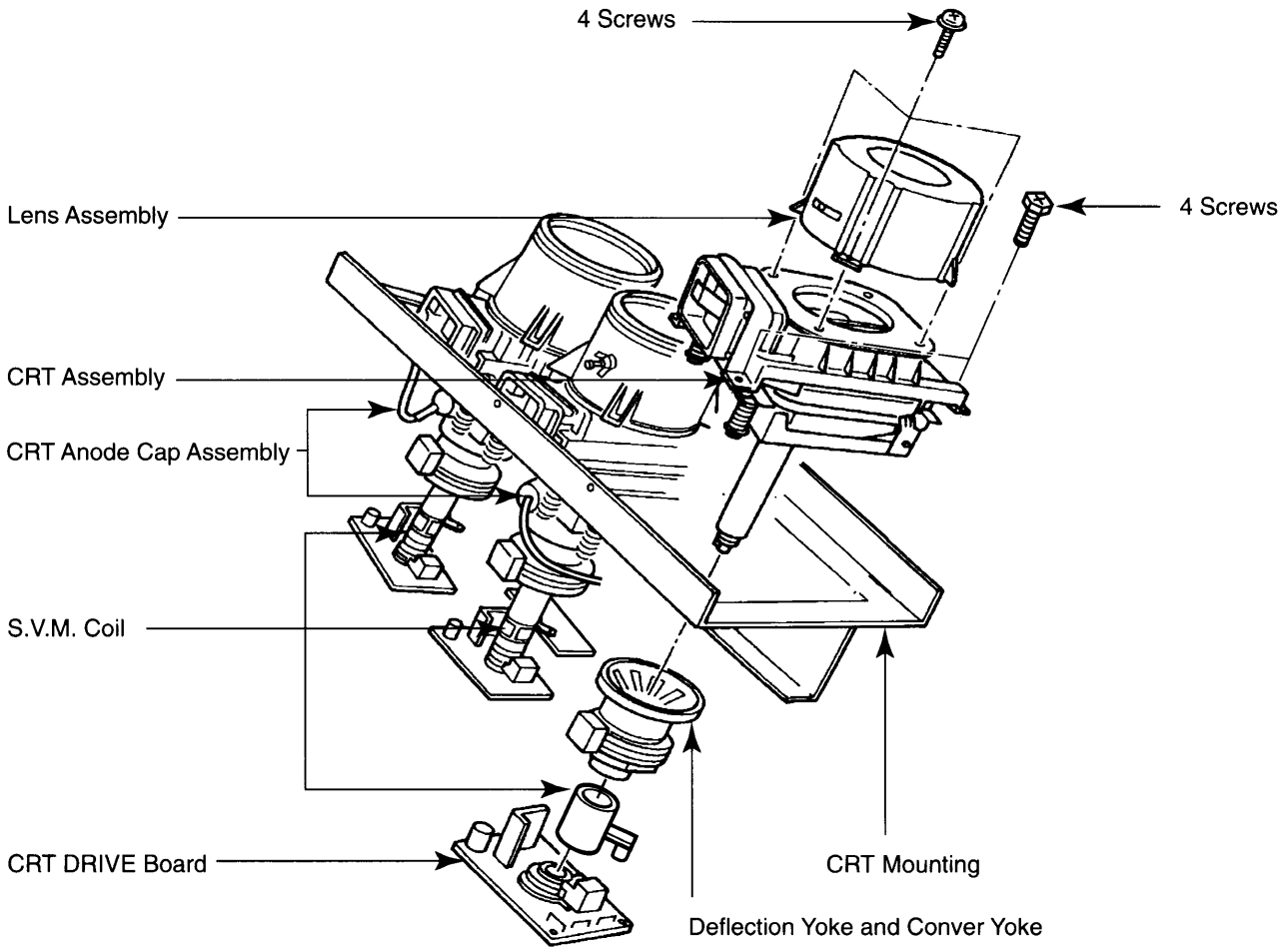
CAUTION : DO NOT LOOSEN THE HEX HEAD BOLTS WITH SPRINGS (12 PCS), BECAUSE THOSE ARE FOR SEALING OF CRT COOLANT.



Attention Serviceman



The Hex Head Bolts with Springs. (see sketch) used on CRT assembly, are "NOT" Adjustment Screws DO NOT LOOSEN-FLUID LEAKAGE WILL OCCUR.



Lens and Neck Components View

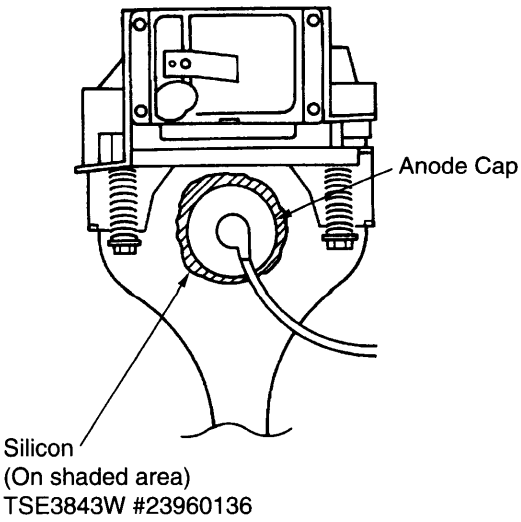
TO REMOVE CRT (Same procedure for R, G, B)

1. Remove CRT DRIVE Board, S. V. M. COIL and DEF. YOKE from CRT.
2. Remove Lens Assembly.
3. Detach CRT Anode Cap from CRT.
4. Remove CRT Assembly from CRT Mounting.

CRT REPLACEMENT (Same procedure for R, G, B)
Reverse the removal procedures except the followings.

1. Anode Cable should be replaced with new one. See "SERVICING PRECAUTIONS" shown below.
2. Install silicon (T461B) to the CRT, replace the Anode cable and put enough silicon again on around the Anode Cap as illustrated.

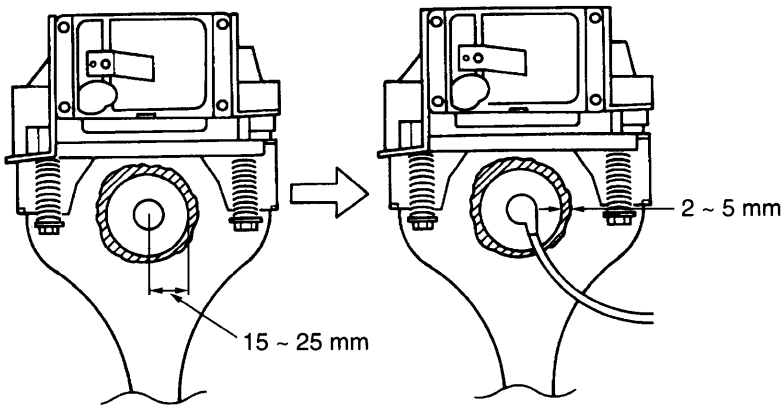
CAUTION: Align the Anode cable as illustrated on page 4.



ADJUSTING PROCEDURE IN REPLACING CRT

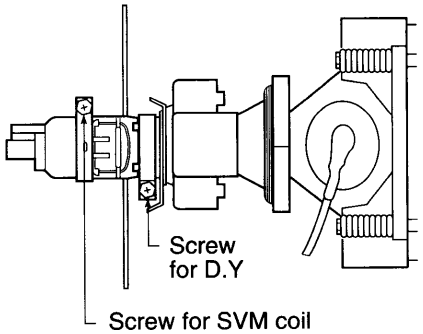
1. R.G.B. CUTOFF (SCREEN VR) ADJUSTMENT (page 6.)
2. R.G.B. FOCUS ADJUSTMENT (page 6.)
3. PICTURE TILT ADJUSTMENT (page 7.)
4. USER CONVERGENCE CENTER CHECK (Refer to owner's manual.)
5. CENTERING ADJUSTMENT (page 7.)
6. CONVERGENCE ADJUSTMENT (page 20.)
7. WHITE BALANCE ADJUSTMENT (page 14.)

Adjustments are complete.



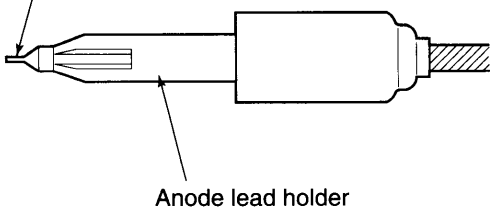
SERVICING PRECAUTIONS

■ Do not use a magnetized screw driver for screws of Deflection Yoke and Velocity Modulation Coil to avoid magnetization of electron gun. Magnetization of electron gun will degrade basic function and result in unbalance of right and left shift of user static convergence, and result in no variable quantity.



■ When replacing the anode cap assembly (CRT) or anode lead assembly (F.B.T.), remove the anode lead holder from old one and attach the holder again to new anode lead.

■ Check the point of anode lead in a straight line, if it is winding, please revise it.



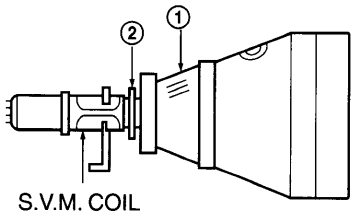
WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

PICTURE TUBE COMPONENTS ADJUSTMENT

ADJUSTING PROCEDURE IN REPLACING CRT

Cutoff → Lens focus → Electrical focus → Yoke horizontal → User convergence center check → Centering (PAL) → Convergence adjustment (PAL/NTSC) → Sub bright adjustment → White balance → End

DESCRIPTION OF NECK COMPONENTS



① Deflection yoke and convergence yoke.
The position on the neck is required most front (CRT funnel side) and the screw is fastened after rotating yoke adjusting picture tilt.

② Centering magnet
After adjusting picture tilt, picture position is finally fixed by this magnet.
In order to get maximum margin of user convergence control for center of screen, this magnet have to be used for center convergence adjustment.

PREPARATION
Operate the receiver for at least 5 minutes.

R, G, B CUTOFF (SCREEN VR) ADJUSTMENT

1. Adjust before replace the screen assembly.
2. Set user control to reset position.
   (CONTRAST → Max
   BRIGHTNESS, COLOR, TINT → Center.)
3. Call up the adjustment mode display, then select the item RCUT.
4. Adjust the data of items **RCUT**, **GCUT**, and **BCUT** to "40H".
5. Press the -⊖ button on PJTV. (Y-MUTE : ON)
6. Gradually rotate R, G and B screen volume of FOCUS PAC clockwise or counterclockwise until the raster appears slightly on the CRT through the each lens, and leave them.
   (Lookin to the lens in order to check the raster.)
7. Press the -⊖ button on PJTV. (Return to Normal Picture)

RGB FOCUS ADJUSTMENT

1. Call-up the adjustment mode (see page 10)
2. Press -⊖ button on the remote controller in order to display the internally-generated white cross-hatch (or white cross-dot). (White cross-hatch or white cross-dot on a black background. See TEST SIGNAL SELECTION on page 11.)
3. Expose only RED by covering the GREEN and BLUE lenses with caps.
4. Loosen the RED lens fixing screws (refer to Fig. a), and adjust the RED lens focus to obtain the sharpest point while observing the middle of the screen.

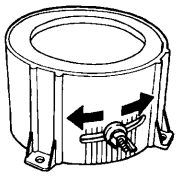
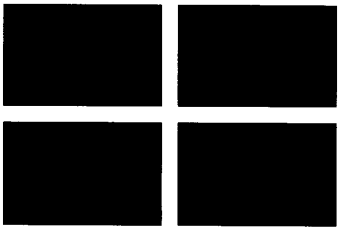


Fig. a

5. Use the focus VR of "R" of the focus pack in order to adjust the electric focus in the middle and peripheral sections of the screen to its sharpest level.
6. Check the RED focus of the whole screen and if necessary repeat steps 4 and 5.
7. Fix the RED lens by tightening its fixing screws.
8. Expose only GREEN by covering the RED and BLUE lenses with caps.
9. Display the internally-generated white cross-hatch (or white cross-dot) signal.
10. Loosen the GREEN lens fixing screen (refer to Fig a) and adjust the GREEN lens focus to obtain the sharpest point while observing the middle of the screen.

In case of warming up of more than 2 hours under a condition that the large anode current is running through the projection tube so that for example the all-white pattern appears, adjust to obtain the sharpest focus while observing the whole screen like in the RED case.

11. Press -⊖ button on the remote controller in order to display the internally-generated white crossbar. (White crossbar on a black background. See TEST SIGNAL SELECTION on page 11.)



12. Use the focus VR of "G" of the focus pack in order to adjust the electric focus in the middle section of the screen to its sharpest level.

Note: Normally the most clearly visible point of the scanning line is the sharpest point of the Green focus, however as the characteristics vary depending on the projection tube, the sharpest focus points of the vertical and horizontal lines may not match each other, thus when you turn the focus VR, if the picture tends to be tremendously unstable (rolls horizontally or vertically), adjust the balance of the vertical and horizontal lines to its best position.

13. Check the GREEN focus of the whole screen and if necessary repeat steps 10 and 11.
14. Fix the GREEN lens by tightening up its fixing screws.
15. Expose only BLUE by covering the RED and GREEN lenses with caps.
16. Press -⊖ button on the remote controller in order to display the internally-generated white cross-hatch (or white cross-dot). (White cross-hatch or white cross-dot on a black background. See TEST SIGNAL SELECTION on page 11.)
17. Loosen the BLUE lens fixing screws (refer to Fig. a), and adjust the BLUE lens focus while observing the middle of the screen.
18. Press -⊖ button on the remote controller in order to display the internally-generated black cross-hatch (or black cross-dot). (Black cross-hatch or black cross-dot on a white background. See TEST SIGNAL SELECTION on page 11.)
19. Use the focus VR of "B" of the focus pack in order to adjust the focus in the middle section of the screen to its sharpest level.
    (The point of the Blue focus becomes sharpest when the brightness level of BLUE is lowest, while the cross-hatch is clearly visible.)

Note: Keep in mind that only the BLUE electric focus is adjusted with the black cross-hatch or black cross-dot.

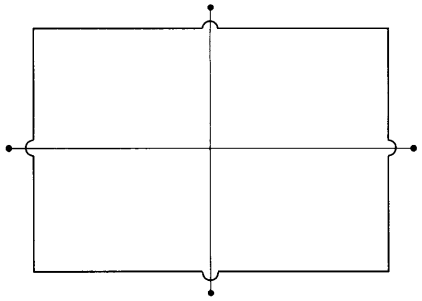
20. Check the BLUE focus of the whole screen and if necessary repeat steps 17 and 19.
21. Fix the BLUE lens by tightening its fixing screws.

TILT ADJUSTMENT

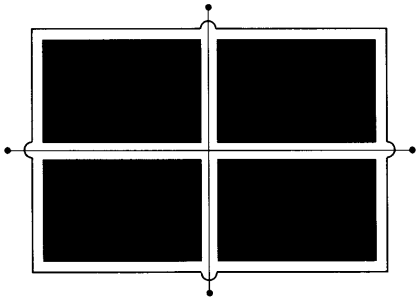
Rotate R, G, B deflection yoke so that picture becomes horizon, then fasten screw.

CENTERING ADJUSTMENT

1. Stretch a thread between two center slots of screen edge (top and bottom, left and right).



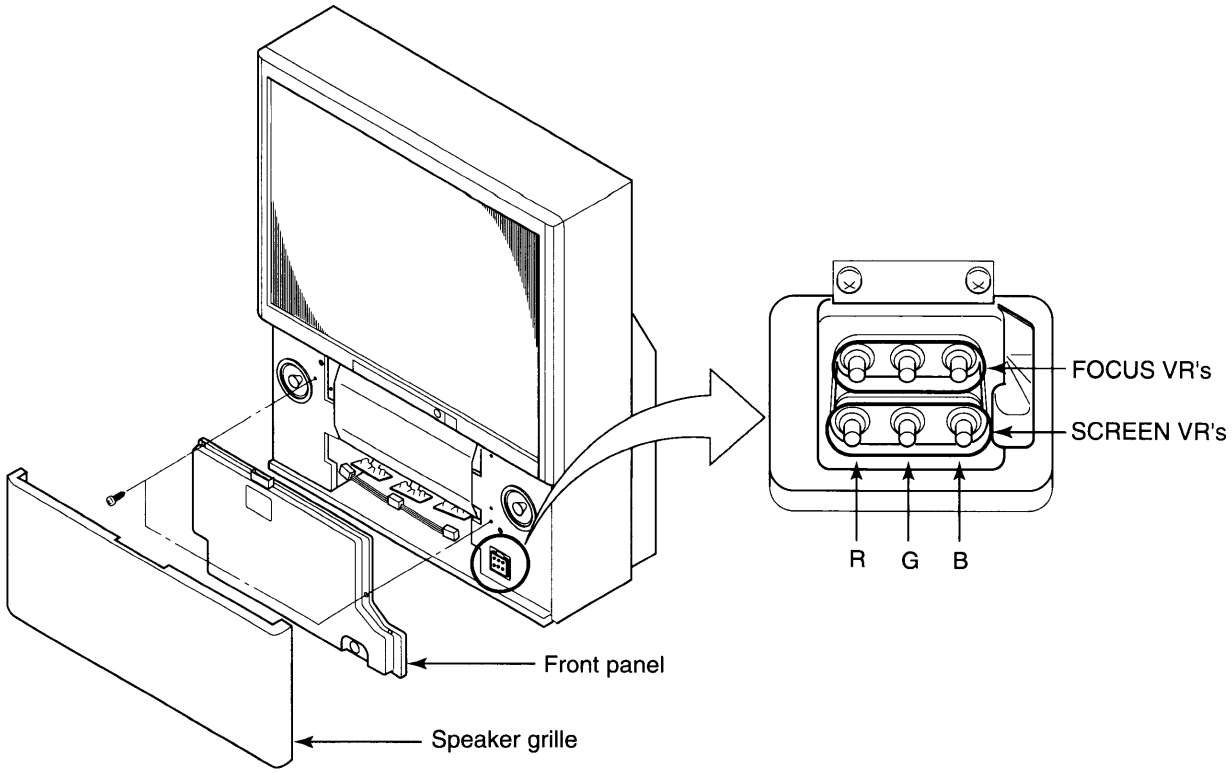
2. Select the adjustment mode. (See page 10.)
3. Press TV/VIDEO button on the Remote Control to display the white cross-bar.



4. Adjust G centering magnet so that the cross-bar pattern center comes to screen center.
5. Perform HEIGHT adjustment . (See page 14.)
6. Perform VERT. LINEARITY adjustment. (See page 14.)
7. Perform WIDTH adjustment. (See page 14.)
8. Check whole quality of green line.
9. Adjust R, B centering magnet so that the cross-bar pattern center comes to screen center.

LOCATION OF SCREEN AND FOCUS VR'S

To remove the Speaker grille and Front panel.



REPLACEMENT OF HIGH VOLTAGE CABLE

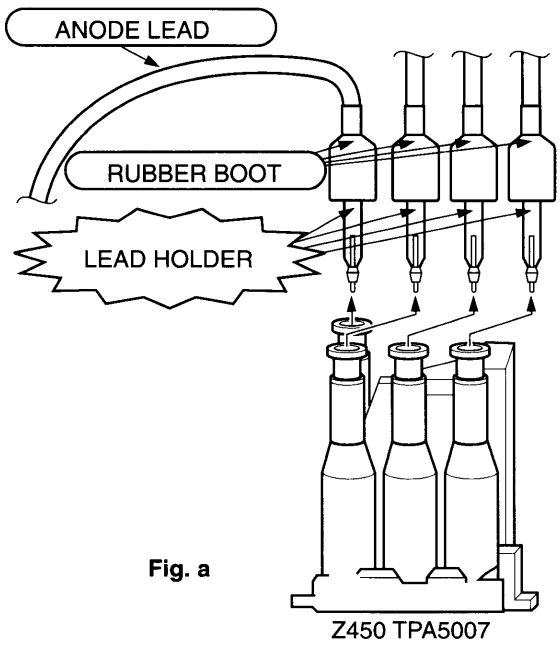


Fig. a

1. When replacing Anode Lead or Anode Cap with new one, remove Lead Holder from old lead as shown in figure below, and put it on new lead. Do not throw away Lead Holder.

NOTE : THE LEAD HOLDER IS ATTACHED TO TPA5007 (Z450), BUT IS NOT ATTACHED TO ANODE LEAD AND ANODE CAP. RUBBER BOOT IS ATTACHED TO ANODE LEAD AND ANODE CAP.

2. Detaching Lead Holder

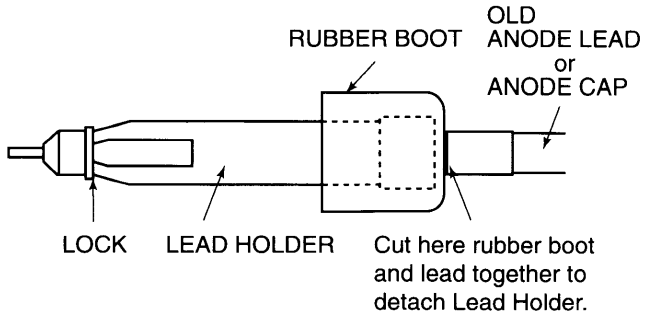


Fig. b

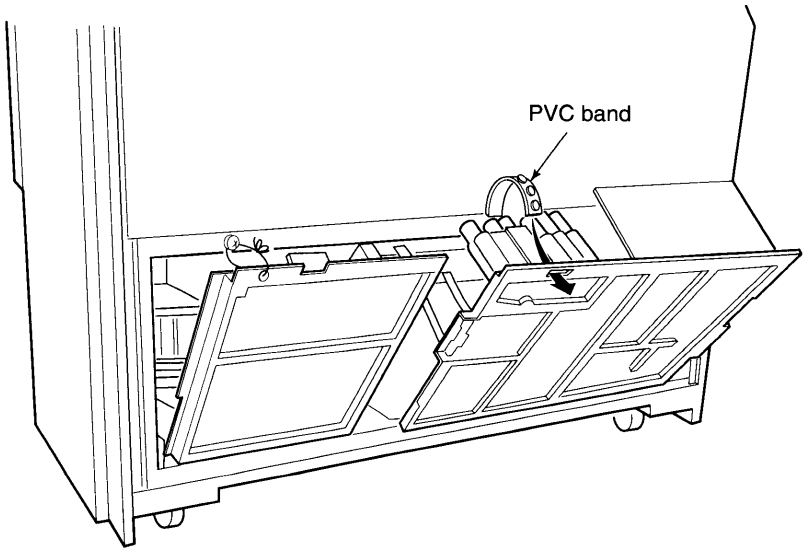
WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

SERVICE POSITION

In order to assure the performance, processed wires shall be replaced after the repair work.
Work procedures are as follows:

1. Remove the back board.
2. Remove lead wires.
3. Draw out the chassis.
4. Insert the front edge of the chassis into the groove where the back board has been inserted and make the chassis stand.
5. Put one screw on cabinet by depth of their length for fixing back board, and then, temporarily use them to hold the CONV/ POWER chassis with wires tied to screws or insert the PVC band into the opening of main board frame to fix the main board chassis as shown bellow.

After repair work finished, replace it in the opposite procedure.



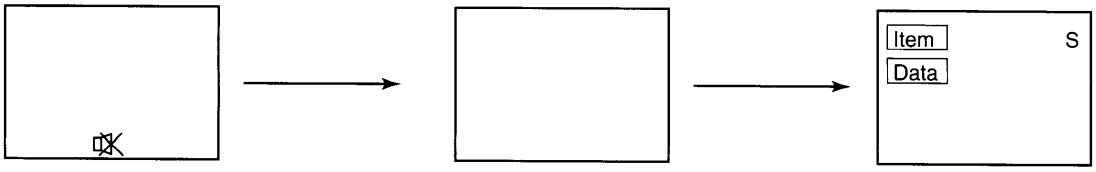
SERVICE MODE

1. ENTERING TO SERVICE MODE

1) Press 🔇 button once on Remote Control.

2) Press 🔇 button again to keep pressing.

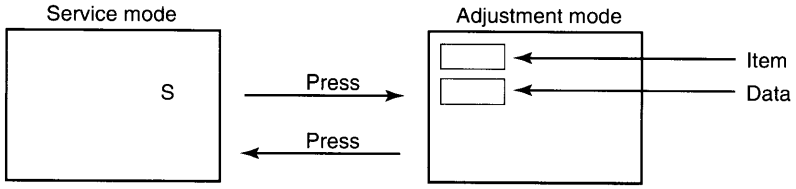
3) While pressing the 🔇 button, press MENU button on TV set.



(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

Screen adjustment mode ON/OFF:	⏻ button (on TV)
Test signal selection :	⏻ button (on Remote)
Selection of the adjustment items :	Channel ▲/▼ (on TV or Remote)
Change of the data value :	Volume ◿ +/– (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory (QA02) :	CALL + Channel button on TV (▲)
Reset the count of operating protect circuit to "00":	CALL + Channel button on TV (▼)
"RCUT" selection :	1 button
"GCUT" selection :	2 button
"BCUT" selection :	3 button
"SCNT" (or "CNTX") selection :	4 button
"COLC" (or "SCOL") selection :	5 button – – – – Color thickness correction
"TNTC" selection :	6 button
Convergence adj :	⏯ button
Test audio signal ON/OFF (1kHz) :	8 button
Self diagnostic display ON/OFF :	9 button

note: Displayed differently as shown below, depending on the setting of the receiving color system.
COLP (PAL)
COLC (NTSC)
COLS (SECAM)

CAUTION : Never try to perform initialization unless you have changed the memory IC.

4. SELECTING THE ADJUSTING ITEMS

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode. (See SETTING & ADJUSTING DATA on page 28)

5. ADJUSTING THE DATA

1) Pressing of VOLUME ◿ +/– button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA OF QA02

After replacing QA02, the following initialization is required.

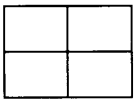
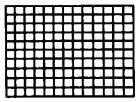
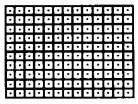
1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above. Perform "Auto search Memory" on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

7. TEST SIGNAL SELECTION

1) Every pressing of –⊖ button on the Remote Control changes the built-in test patterns on screen as described below in SERVICE MODE.

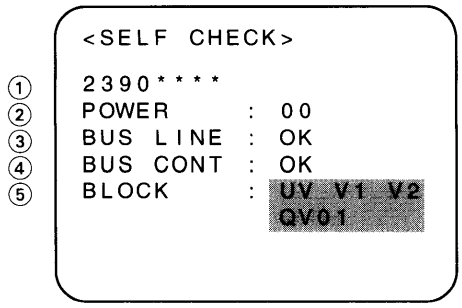
Signal off ⟶ NTSC signals (14 patterns)
⟵ PAL signals (14 patterns) ⟵

Signals	Picture
• Red raster • Green raster • Blue raster • All Black • All White	
• Black & White	
• Black cross-bar • White cross-bar • Black cross-bar on green raster	
• Black cross-hatch • White cross-hatch	
• Black cross-dot • White cross-dot	
• H signal (white) • H signal (black)	

* The signals marked with ▒ are not usable to display in the Test signal for some model.

8. SELF DIAGNOSTIC FUNCTION

1) Press "9" button on Remote Control during display of adjustment menu in the service mode.
   The diagnosis will begin to check if interface among IC's are executed properly.
2) During diagnosis, the following displays are shown.



Indicated color of mode now selected : Green and Red
Indicated color of other modes : White

Green : Normal
Red : The microcomputer operates to provide judgement of no video signal. The red color is still indicated though the signal is input, failure may exist in input signal line including QV01.
QV01 : In case of indication green ---Normal
In case of indication red with input signal----
Failure may exist in output line including QV01.

① Part number of microcomputer (QA01)
② Operation number of protecting circuit ----"00" is normal.
When indication is other than "00", overcurrent apts to flow, and circuit parts may possibly be damaged.
③ BUS LINE CHECK ----"OK" is normal.
"SDA1-GND" ---------- SDA-GND short circuit.
"SCL1-GND" ---------- SCL-GND short circuit.
"SCL1-SDA1" ---------- SCL-SDA short circuit.
④ BUS CONT ----"OK" is normal.
When indication shows "Q ○○○ NG", the device with the number may possibly be damaged.
⑤ BLOCK
UV : TV reception mode
V1 : VIDEO 1 input mode (→Ⓒ1)
V2 : VIDEO 2 input mode (→Ⓒ2)

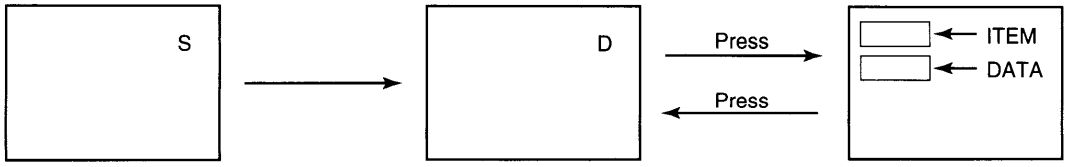
NOTE: Component which controls character display on screen is QT01 (TELETEXT IC). If this display function fails to operate due to damage in QT01, self diagnosis procedure is as follows.
(1) In case that power indicator is blinking with interval of 0.5 seconds, it means protecting circuit (Current limiter) is operating, and circuit components may possibly be damaged. Check related components.
(2) In case that power indicator is blinking with interval of 1 second. Protecting circuit does not operate, but a part of Bus line does not operate normally. Check Bus line.

* The items marked with ▒ are not usable to display in the SELF DIAGNOSTIC FUCTION for some model.

DESIGN MODE

1. ENTERING TO DESIGN MODE

1) Select the Service mode. 2) While pressing CALL button on Remote and press MENU button on TV. 3) Press MENU button on TV.



(Design mode) (Adjustment mode)

When QA02 is initialized, items "OPT0" and "OPT1" of DESIGN MODE are set to the data of the representative model of this chassis family.
Therefore, because ON-SCREEN specification remains in the state of the representative of model. This model is required to reset the data of items "OPT0" and "OPT1".

2. SELECTING THE ADJUSTING ITEMS

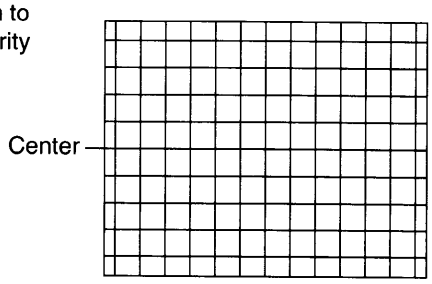
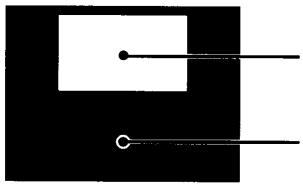
Every pressing of CHANNEL ▼ button in the design mode changes the adjustment items in the order of table-3. (▲ button for reverse order)

Refer to table-3 for data of design mode.
(See SETTING & ADJUSTING DATA on page 28)

3. ADJUSTING THE DATA

Pressing of VOLUME ▲ or ▼ button will change the value of data.

ELECTRICAL ADJUSTMENT

ITEM	ADJUSTMENT PROCEDURE
WIDTH (WID)	1. Call up the adjustment mode display, then select the item **WID**. 2. Press the VOLUME ▼ button to get the picture so the left or right edges of raster begins to lack. 3. Press the VOLUME ▲ button to advance the data by 10 steps. Note : Check the horizontal picture position is correct.
VERTICAL LINEARITY (VLIN)	1. Call up the adjustment mode display, then select the item **VLIN**. 2. Press the TV/VIDEO button on Remote until the cross-hatch pattern appears on the screen. 3. Press the VOLUME ▲ or ▼ button to obtain the picture of the best linearity 
HEIGHT (HIT)	1. Call up the adjustment mode display, then select the item **HIT**. 2. Press the VOLUME ▼ button to get the picture so the top or bottom of raster begins to lack. 3. Press the VOLUME ▲ button to advance the data by 11 steps. Note : Check the vertical picture position is correct.
WHITE BALANCE (RCUT) (GCUT) (BCUT) (RDRV) (BDRV)	Black and White pattern  1. Set user control to reset position. (CONTRAST → Max BRIGHTNESS, COLOR, TINT → Center.) 2. Call up the adjustment mode display, then select the item RCUT. 3. Adjust the data of items **RCUT**, **GCUT**, and **BCUT** to "40H". 4. Press the -⊖ button on PJTV. (Y-MUTE : ON) 5. Gradually rotate R, G and B screen volume of FOCUS PAC clockwise or counterclockwise until the raster appears slightly on the CRT through the each lens, and leave them. (Lookin to the lens in order to check the raster.) 6. Press the -⊖ button on PJTV. (Return to Normal Picture) 7. Press the -⊖ button on Remote, and select the Black and White pattern. 8. Adjust the data of items **RCUT**, **GCUT** and **BCUT** for proper white-balanced picture in low light area. 9. Adjust the data of items **RDRV** and **BDRV** for proper white-balanced picture in high light area. 10. Check the white balance in both low and high light areas. If necessary, perform again steps from 8 to 9.

Item	Name	Setting user control	Input signal	Measurement point	Adjustment method	Adjustment rating
SCNT	Sub-contrast	Dynamic mode	Sub-bright signal (J2 ch)	Q501#55 (TP501)	1) Adjust the amplitude from the pedestal level to the white peak.	3,3 ± 0,2 Vop
BRTC	Sub-brightness	Dynamic mode	Sub-bright signal (J2 ch)	Screen adjustment	1) Adjust the number of blacked out sub-bright signal lines. 2) Adjust after adjusting W/B and SCNT.	4 ± 1,5 lines
COLP	Sub-color PAL	Dynamic mode	Sub-bright signal (PAL)	Q501#55 (TP501)	1) Adjust the amplitude of the rainbow color bar (p-p value of the upper half). 2) Mute the video. Adjust after the COLC adjustment.	1,8 ± 0,2 Vop
BELL	BELL filter	Dynamic mode	SECAM color bar (E2 ch)	QQ01#21 (TPM01)	1) Use synchro to adjust BELL so that the waveform is flat. 2) Match to the white component.	100 ± 10 %
SRY	SECAM R-Y black level	Dynamic mode	SECAM color bar (E2 ch)	Q501#55 (TP501)	1) Adjust SRY so that the monochrome signal component matches the H.BLK level. 2) Adjust after the COLS and BELL adjustments.	0 ± 40 mV(p-p)
SBY	SECAM B-Y black level	Dynamic mode	SECAM color bar (E2 ch)	Q501#55 (TP501)	1) Adjust SBY so that the monochrome signal component matches the H.BLK level. 2) Adjust after the COLS and BELL adjustments.	0 ± 40 mV(p-p)
COLS	Sub-color SECAM	Dynamic mode	SECAM color bar (E2 ch)	Q501#55 (TP501)	1) Adjust the color bar amplitude (mute the video when adjusting). 2) Adjust the p-p value of the upper half.	1,8 ± 0,2 Vop
COLC	Sub-color NTSC	Dynamic mode	Sub-bright signal (J2 ch)	Q501#55 (TP501)	1) Adjust the amplitude of the rainbow color bar (p-p value of the upper half). 2) Mute the video. 3) Adjust after the SCNT adjustment.	1,8 ± 0,2 Vop
Screen adjustment	Screen	Factory screen adjustment mode		CRT screen	1) Make the periphery extremely dark. 2) Set the factory screen adjustment mode (Y mute, DRV.CUT.=40H). 3) Measure the CRT screen directly and adjust the screen VR to the point where the light starts. 4) Make the above adjustment for the R, G and B tubes.	The point where the light starts.

Item	Name	Setting user control	Input signal	Measurement point	Adjustment method	Adjustment rating
Focus adjustment	Focus	Dynamic mode	NTSC RETMA (white cross-bar)	Screen adjustment	1) Adjust the electrical focus and optical focus repeatedly to obtain the best focus. 2) During adjustment, use a jig to block the other CRTs. 3) Make the above adjustment for the R, G and B tubes. Refer to the adjustment method in this text for details.	
RDRV/ BDRV	Bright W/B			Screen adjustment	1) Adjust the color temperature of the bright part (103 cd/m^2).	11500k + 0,0075duV
RCUT/ BCUT	Dark W/B			Screen adjustment	1) Adjust the color temperature of the dark part (17 cd/m^2).	10500k + 0,0105duV
High-voltage adjustment	High voltage	Dynamic mode	Phillips pattern (PAL)	Between T461 and Z450	1) Connect a high-voltage meter between T461 and Z450 and adjust the high voltagewith R450 (user adjustment standard).	30,7 ± 0,2 kV
Screen position adjustment		Dynamic mode	Phillips pattern (PAL)	Screen adjustment set: facing east	1) Adjust the centering magnets so that the screen is positioned in the center of the dummy screen (cross).	
HIT VLIN	Vertical amplitude adjustment	Dynamic mode	Phillips pattern (PAL)	Screen adjustment set: facing east	1) Use HIT data to reduce the vertical amplitude until the up and down flags first appear on the screen. 2) Next, use HIT to increase the vertical amplitude until either the up or down flag is aligned with the edge of the screen (align the vertical center of the pattern with the screen center mark).	
WID	Horizontal amplitude adjustment	Dynamic mode	Phillips pattern (PAL)	Screen adjustment set: facing east	1) First, lower the WID data to reduce the amplitude until the flags are completely visible on the left and right sides. 2) Next, use the WID data to increase the horizontal amplitude until the edge of either the left or right Phillips pattern flag is aligned with the edge of the screen.	

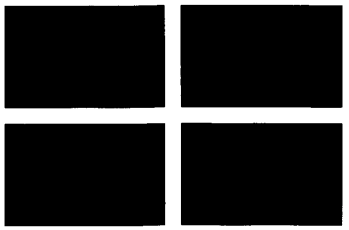
Item	Name	Setting user control	Input signal	Measurement point	Adjustment method	Adjustment rating
STRP	Convergence pattern horizontal phase adjustment	Dynamic mode	Phillips pattern (PAL)	Screen adjustment set: facing east	Align the centers of the RETMA pattern and Convergence pattern (adjust the vertical phase only).	
NTRP	Convergence pattern horizontal phase adjustment	Dynamic mode	Phillips pattern (NTSC)	Screen adjustment set: facing east	Align the centers of the RETMA pattern and RETMA pattern (adjust the horizontal phase only).	

Sub-screen Adjustment Procedure (PIP)

[Data adjustment]

1. Sub-screen sub-bright adjustment
   Conditions: Adjust after the main screen adjustment.
   Adjustment: (1) Display the in-company signal on Japanese channel 2 on both the main and sub screens.
   (2) Select adjustment item PYOF and adjust the number of blacked out lines to 5 ± 1.5 lines.

<Reference Data>
2. Sub-screen color differential DC offset adjustment
   Conditions: Adjust after the sub-screen sub-bright adjustment.
   Adjustment: (1) Display all black signals on both the main and sub screens.
   (2) Observe PYO1 #4 (Rout).
   (3) Select adjustment item PIOF and adjust the DC offset to 0 ± 10mV.
   (4) Observe PYO1 #6 (Bout).
   (5) Select adjustment item PQOF and adjust the DC offset to 0 ± 10mV.

Adjustment item	Adjustment method
Focus adjustment Electrical focus	Conditions: • RETMA (NTSC) • User adjustment: Dynamic Mode Adjustments: 1. Common items 1) Use the focus volume of the focus block (Z 410) and adjust each R, G, and B tube to the position where the center of the screen comes to optimum focus. 2) Call up the built-in cross pattern by the factory-adjusted mode and turn it to the single color of Green using the lens cap. (See following figure) 3) Adjust the electrical focus of Green so that the green vertical scanning lines can stand out most clearly. 4) In case the flare appears on vertical and horizontal lines due to the improper alignment (*) of Green, turn the focus VR clockwise until the moment immediately before the flare becomes the least. Note) Items 2 ~ 4 refer only to Green. (*) The word "alignment" in this particular case means the assembling precision of an electron gun. Improper alignment can result in the considerably unstable screen as well as unsatisfactory focus of vertical and horizontal lines when the focus VR is turned.  ↑ White Cross on Black Background
Lens focus	Adjustment) 1) Adjust each lens of R, G, and B tube to the position where the center of the screen comes to optimum focus. (This is a preliminary adjustment, since a regular adjustment takes a long time until the lens focus can be stabilized)

CONVERGENCE ADJUSTMENT

1. PICTURE ADJUSTMENT

The adjustment are done on two screens; 50 Hz mode (PAL) and 60 Hz mode (NTSC). To synchronize correction wave to each frequency, receive the suitable signal.

1-1. Change of Memory (E^2PROM)

Memory of Q713 E^2PROM is nonvolatile, and adjusted data is stored. Since data in RAM of Q701 is eliminated with power OFF, the RAM is set by soft command of microcomputer QA01 at every power ON. The adjusted data which is obtained from screen-watching is once stored in RAM inside QA01. The whole data in RAM which is corrected on each adjusting point and is changed, is saved into E^2PROM (Q713) as a fixed data. The data capacity per one screen requires 8k for 50 Hz mode (PAL), and 4k for 60 Hz mode (NTSC).

1-2. Service Mode

1-2-1. Outline

Service mode is controlled by software of microcomputer QA01, and is one of function of set.

This mode is designed so that ordinary user cannot use this, and special operation is required to use this.

Data change is done by direct shift (cursor display) of adjusting points; 50 Hz mode (PAL) 8 × 8/1 color and 60 Hz mode (NTSC) 8 × 8/1 color.

1-2-2. To Enter and to Exit

Press MUTE key on remote hand unit twice and keep pressing the key, press MENU key of set console.

Then service data will be displayed on top left of screen. Under the condition, press " ⇥|♪|⇤ " key on remote hand unit, and the screen shows crosshatch picture (Later, the first picture). Press again " ⇥|♪|⇤ " key, and the screen changes to crosshatch + data display (Later, second picture). This time changed data are automatically saved

Further, press " ⇥|♪|⇤ " key on remote, the screen returns to original picture.

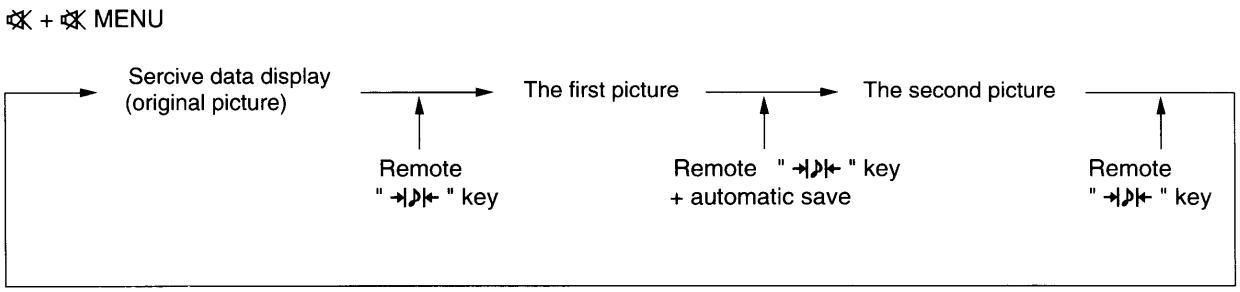
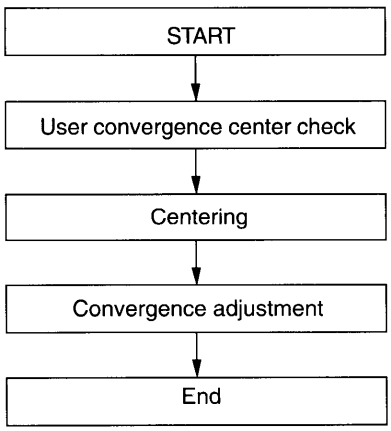
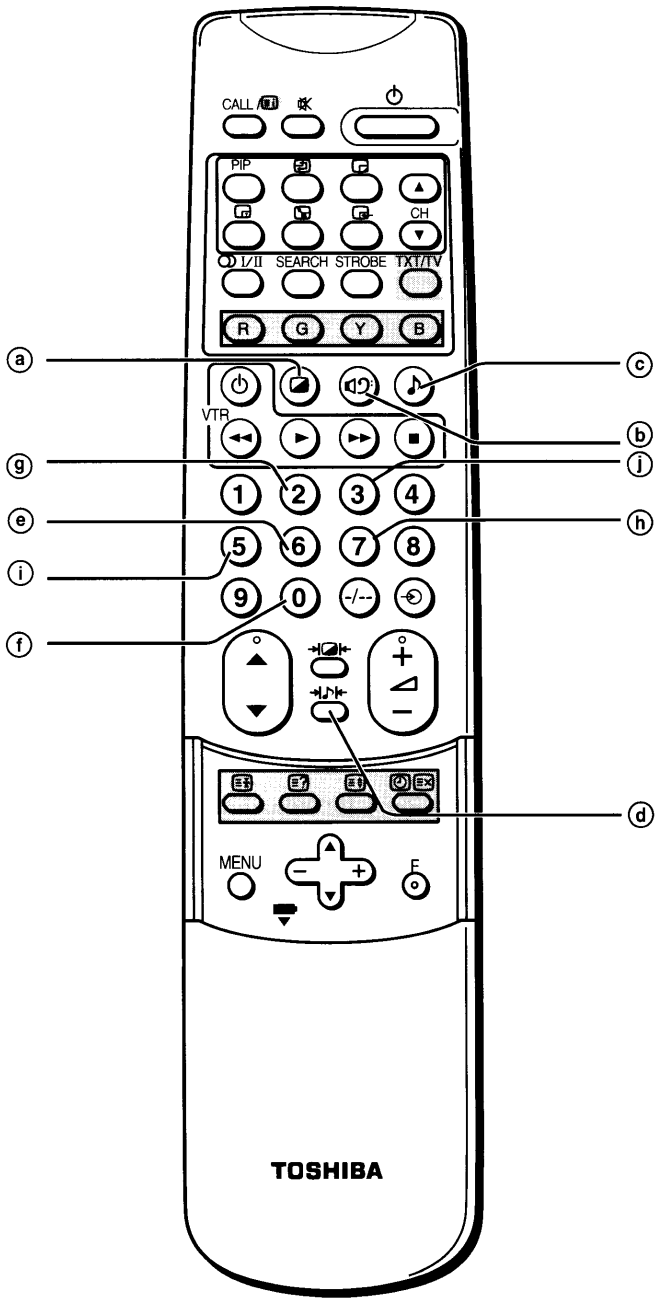


Fig. 10 -1

Adjusting Procedure In Replacing Convergence Unit/Main Def



2. KEY FUNCTION OF REMOTE CONTROL UNIT



ⓐ ◪ key ..... Red test pattern ON/OFF

ⓑ key ..... Green test pattern ON/OFF

ⓒ ♪ key ..... Blue test pattern ON/OFF

ⓓ key ..... Mode picture change-over

ⓔ 6 key ..... Cursor shift / data change mode change-over

ⓕ 0 key ..... Cursor down / adjusting point down

ⓖ 2 key ..... Cursor up / adjusting point up

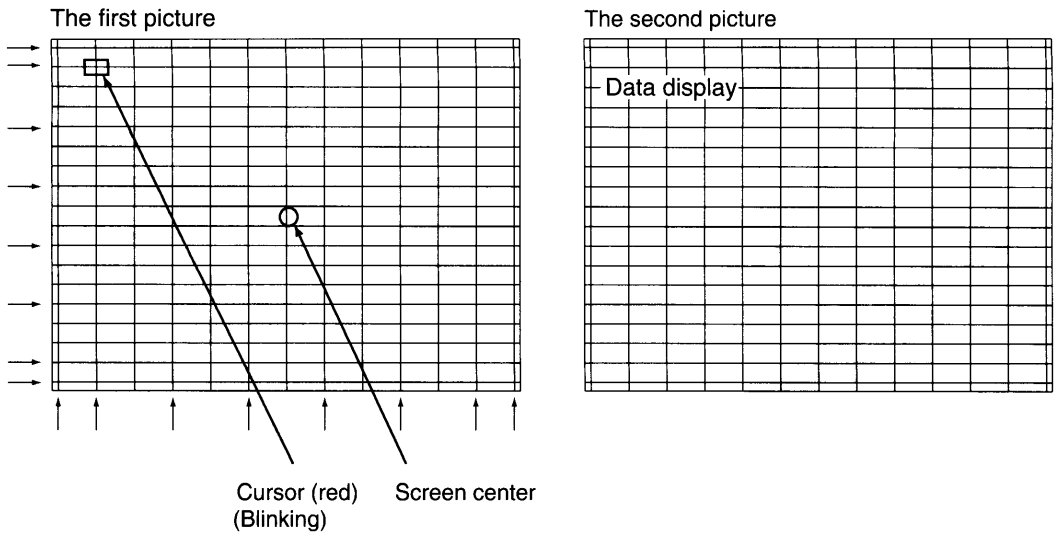
ⓗ 7 key ..... Cursor right / adjusting point right

ⓘ 5 key ..... Cursor left / adjusting point left

ⓙ 3 key ..... Cursor color change

3. Picture

a) 50 Hz mode (PAL) . . . . Correcting point: Horizontal 8 x Vertical 8 (Arrow marks denote correcting point)



The first picture

Crosshatch pattern. Pattern colors are three color display. Cursor is blinking in red. When changed, condition is last memory state.

Cursor is ..... Data change mode in lighting,
Cursor shifting mode in blinking.

Display color shows the color that data change is possible.

The second picture

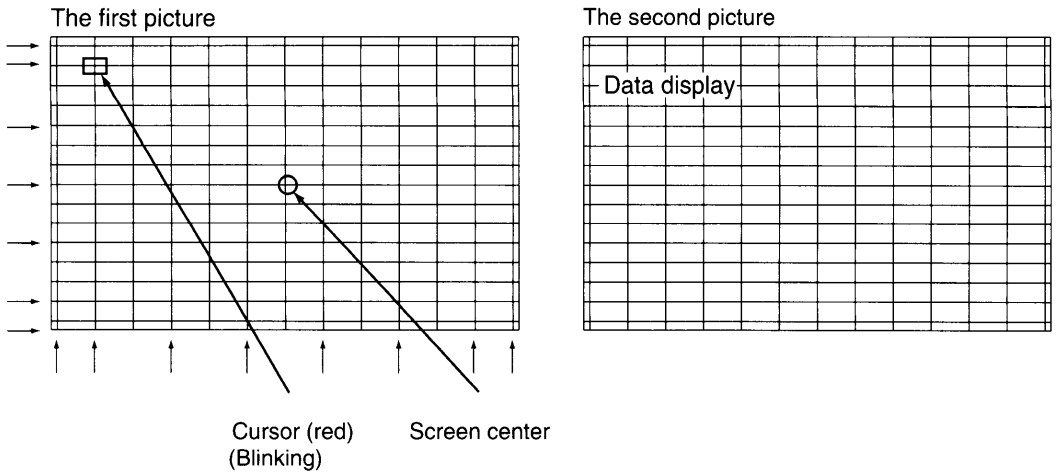
When entering from the first picture to the second picture, correcting wave of convergence is muted for one second. During this period, the changed data is transferred from RAM Q701 to E2PROM Q713, and saved.

The second picture is indicated with data on top left of the first picture, therefore, convergence cannot be adjusted by this picture.

Caution:

- Receive suitable signal for adjustment. Centering of green picture can be done in 50 Hz mode (PAL).
- Centering of 60 Hz mode (NTSC) can be adjusted by convergence adjustment. Besides, decide the center by cross pattern of static convergence in menu, and adjust convergence from center to circumference.

b) 60 Hz mode (NTSC) . . . . Correcting point: Horizontal 8 x Vertical 7 (Arrow marks denote correcting point)



The first picture

Crosshatch pattern. Pattern colors are three color display. Cursor is blinking in red. When changed, condition is last memory state.

Cursor is ..... Data change mode in lighting,
Cursor shifting mode in blinking.

Display color shows the color that data change is possible.

The second picture

When entering from the first picture to the second picture, correcting wave of convergence is muted for one second.

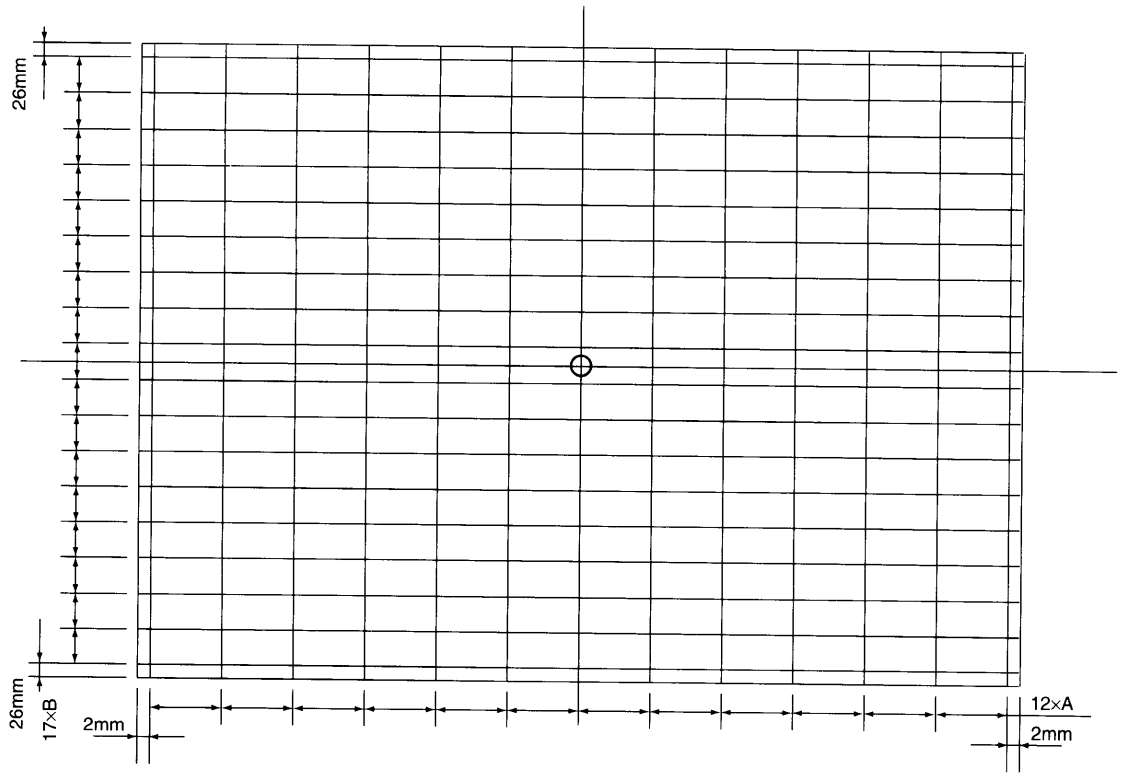
During this period, the changed data is transferred from RAM Q701 to E^2PROM Q713, and saved.
The second picture is indicated with data on top left of the first picture, therefore, convergence cannot be adjusted by this picture.

Caution:

- Receive suitable signal for adjustment. Decide the center by cross pattern of static convergence in menu, and adjust convergence from center to circumference.

4. ADJUSTING PICTURE DIMENSION (GREEN PICTURE) (50")

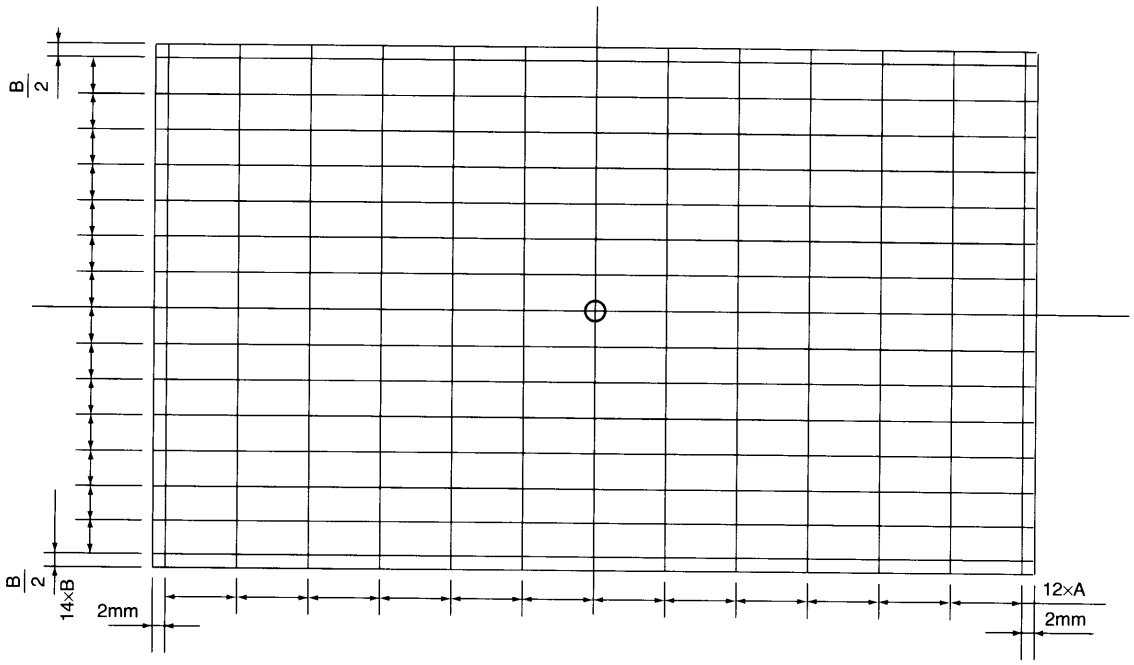
1.50 Hz mode (PAL)



50 inches 4:3 Screen size: Horizontal 1014mm, Vertical 760mm
Dimension A: 84mm, Dimension B: 41.5mm

○ mark: center

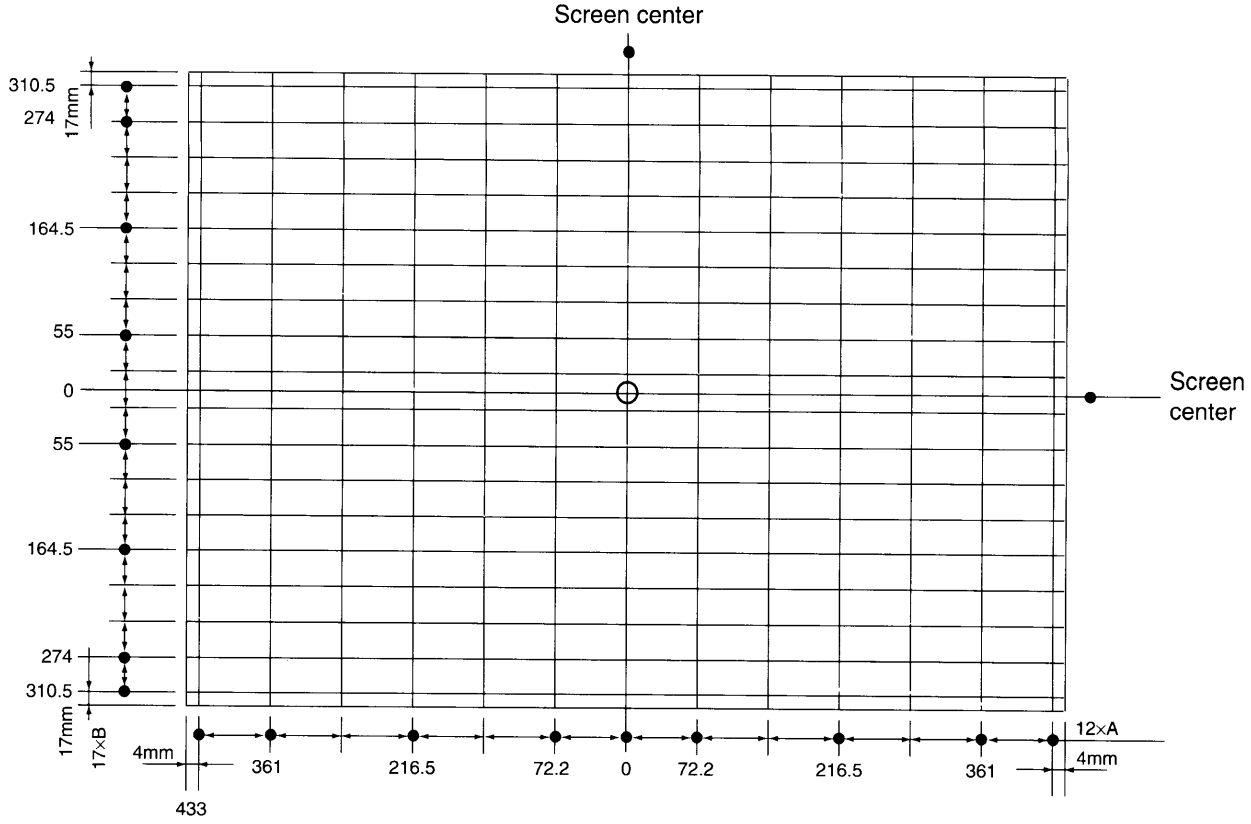
2. 60Hz mode (NTSC)



50 inches 4:3 Screen size: Horizontal 1014mm, Vertical 760mm
Dimension A: 84mm, Dimension B: 50.5mm

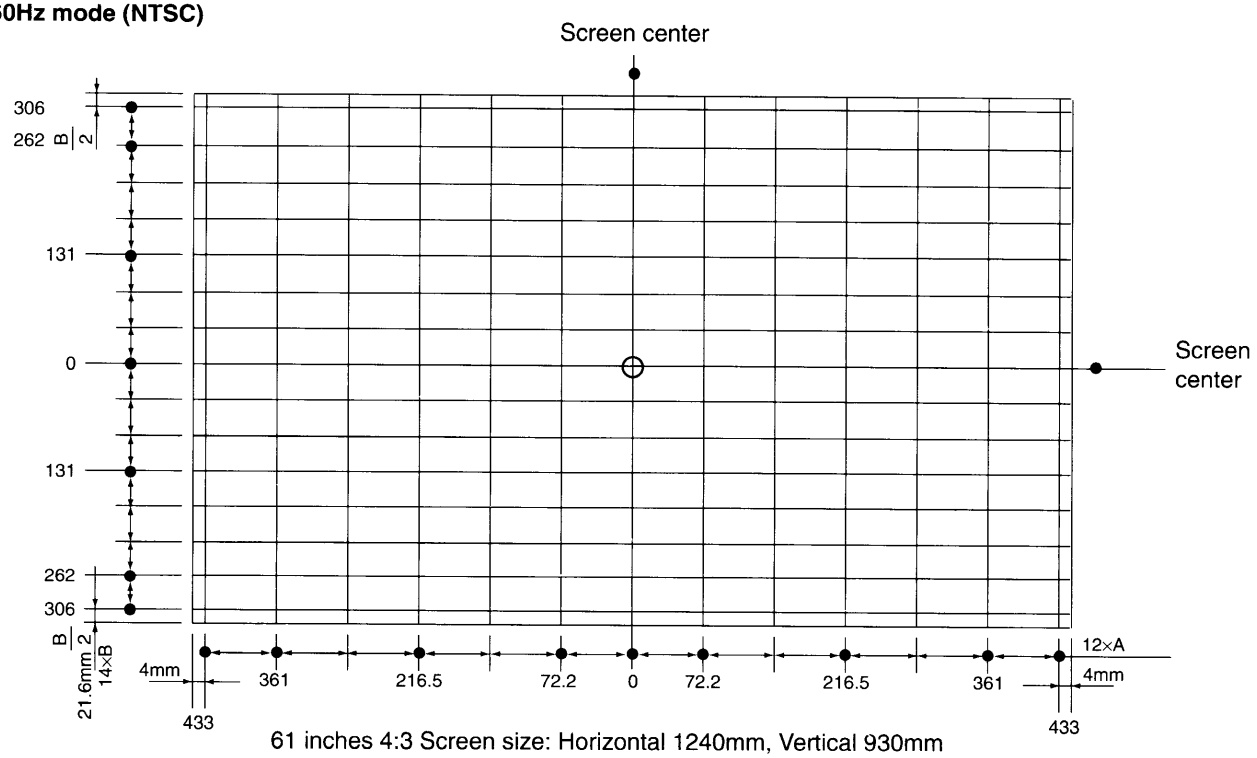
5. ADJUSTING PICTURE DIMENSION (GREEN PICTURE) (61")

1.50 Hz mode (PAL)



61 inches 4:3 Screen size: Horizontal 1240mm, Vertical 930mm ○ mark: center
Dimension A: 103mm, Dimension B: 50.7mm

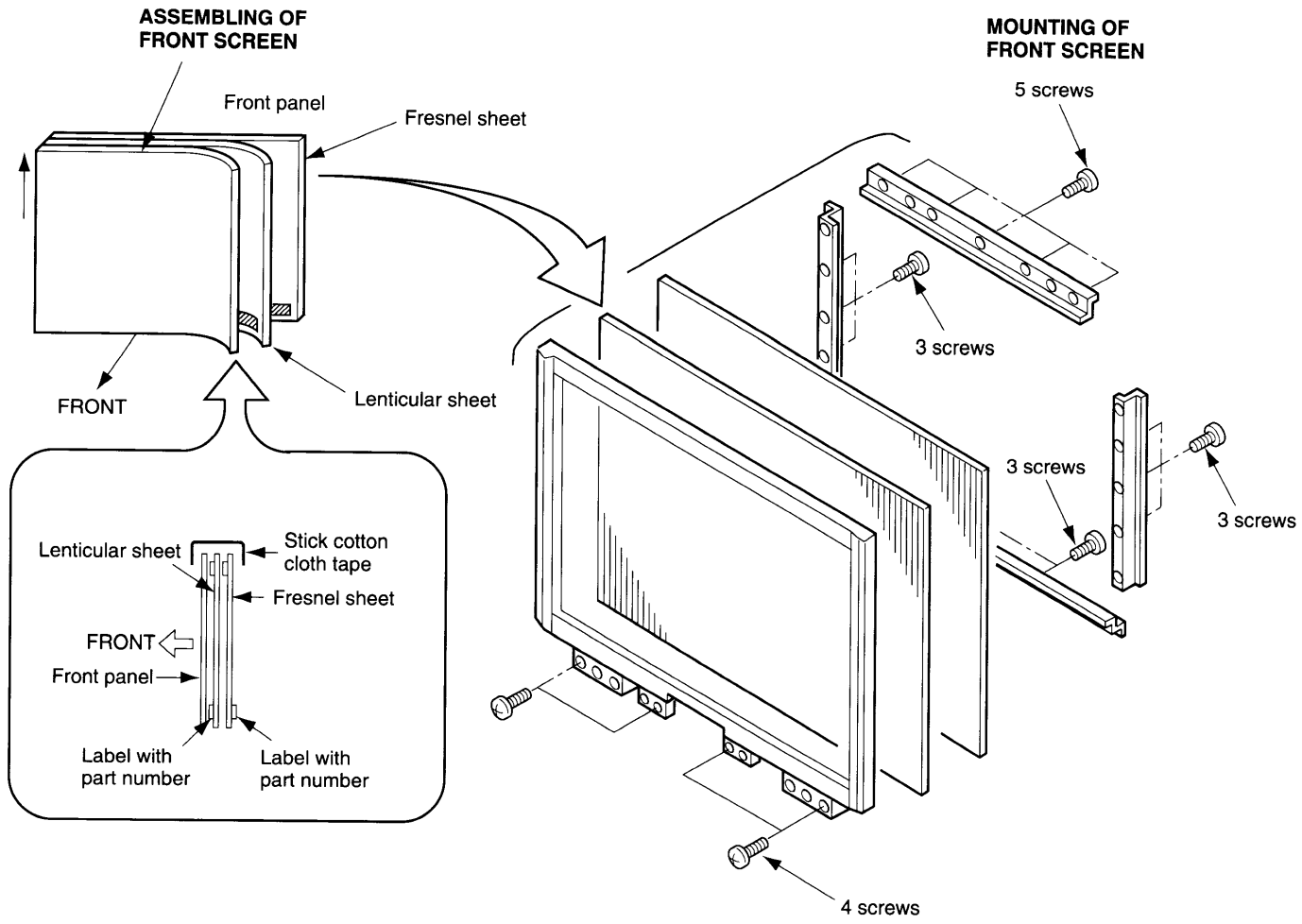
2. 60Hz mode (NTSC)



61 inches 4:3 Screen size: Horizontal 1240mm, Vertical 930mm
Dimension A: 103mm, Dimension B: 62mm

SCREEN AND MIRROR ALIGNMENTS

(50", 61")



SCREEN AND MIRROR ALIGNMENTS

Note: To prevent leaving fingerprints on the optical parts (lens and mirror), do not take them by your hands.

How to clean the lens and mirror

1. Be sure to remove dust or dirt from them by airbrush.
2. If they are stained with dust or dirt, breathe on them then clean with specified cloth.
   If they are stained with other things, clean them with specified cloth and detergent.

Detergent... LENS LUSTER (made by Edmund Science Co.), etc.

How to clean the screen

Be sure to clean it with soft cloth to prevent damage.

1. Clean it with soft cloth and diluted neutral detergent.
2. Wipe off detergent with soft cloth and pure water.
3. Wipe off moisture with dry cloth.

Note: To protect the black labels on the surface, never clean with alcohol, benzine, amyl acetate, etc.

CIRCUIT CHECKS

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST to minimum (zero beam current).
3. High voltage must be measured below (B) kV.

   Refer to table-1 for high voltage (B).
   (See SETTING & ADJUSTING DATA on page 28)
4. Vary the BRIGHTNESS to both extremes to be sure the high voltage does not exceed the limit under any conditions.

CAUTION:

When the following parts fail, check the High Voltage after replacing.

Location No.	Name	Name
T461	Flyback Trans.	TFB3078BD
D489	Zener Diode	MTZJ3.6B
Q480	Transistor	2SC2023
Q483	IC	TA75558S
R435	Resistor	33k ohm, ±5%
R489	Resistor	3.3k ohm, ±5%
R490	Resistor	3.3k ohm, ±5%
R450	VR	1k ohm
C440	Capacitor	1000pF, ±3%
C443	Capacitor	6800pF, ±3%
C444	Capacitor	5100pF, ±3%

ANODE VOLTAGE MEASURING METHOD

CAUTION: Take extra precaution when measuring this high voltage. High voltages are also present in surrounding circuit boards (CRT DRIVE assembly, DEFLECTION assembly, and POWER SUPPLY assembly).

1. Disconnect the FBT anode cable as outlined below. Measure high voltage at the point where the cable enters the FBT.
2. Holding the rubber cover firmly, turn it counterclockwise and check that the lock has been disengaged. (See Fig. b on page 8.)
3. Determine the extent of the rubber cover before disconnecting the cable.
4. Pull straight up the anode cable to disconnect.
5. When reconnecting the cable, proceed in the reverse order.
   After reconnecting, tug on the cable to check that it is secure.

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

【 SAFETY INSTRUCTIONS 】

		50" 61"
HIGH VOLTAGE AT ZERO BEAM:	(A)	31.9 kV
MAX HIGH VOLTAGE:	(B)	32.5 kV
AV VOLTAGE	(C)	110~240 V

Table-1

【 SERVICE MODE 】

ADJUSTING ITEMS AND DATAS IN THE SERVICE MODE:

Item	Adjustment	Reference data
RCUT	R CUTOFF (B/W)	40H
GCUT	G CUTOFF (B/W)	40H
BCUT	B CUTOFF (B/W)	40H
RDRV	R DRIVE	40H
BDRV	B DRIVE	40H
CNTX	SUB CONTRAST MAX	7FH
BRTC	SUB BRIGHT CEN	80H
COLC	SUB COLOR CEN NTSC	27H
TNTC	SUB TINT CEN	44H
COLP	SUB COLOR CEN PAL	27H
COLS	SUB COLOR CEN SECAM	27H
SCOL	SUB COLOR	1FH
SCNT	SUB CONTRAST	0CH
VOLS	VOL SCART	75H
FVOL	FM VOL PRE SCALE	15H
NVOL	NICAM VOL PRE SCALE	3CH
NICL	NICAM THRESHOLD LEVEL	03H
NICH	NICAM THRESHOLD LEVEL	0AH
IDL	IGR THRESHOLD LEVEL	04H
IDH	IGR THRESHOLD LEVEL	0EH

Item	Adjustment	Reference data
XVOL	EXT PRE. VOLUME	11H
EMX	NICAM ON LEVEL	FCH
EMN	NICAM OFF LEVEL	64H
HPOS	50Hz H-POSITION	0DH
VPOS	V-POSITION	04H
HIT	HEIGHT	52H
VLIN	V-LINEARITY	13H
VSC	V-S CORRECTION	08H
VPS	V-SHIFT	15H
VCP	V-COMPENSATION	02H
WID	PICTURE WIDTH	1FH
PARA	E-W PARABOLA	05H
CNR	E-W CORNER	00H
TRAP	TRAPEZIUM	0BH
HCP	H-COMPENSATION	02H
VFC	V-F CORRECTION	0FH
BELL	SECAM BELL FILTER	80H
SRY	SECAM R-Y	08H
SBY	SECAM-B-Y	08H

Table-2

【 DESIGN MODE 】

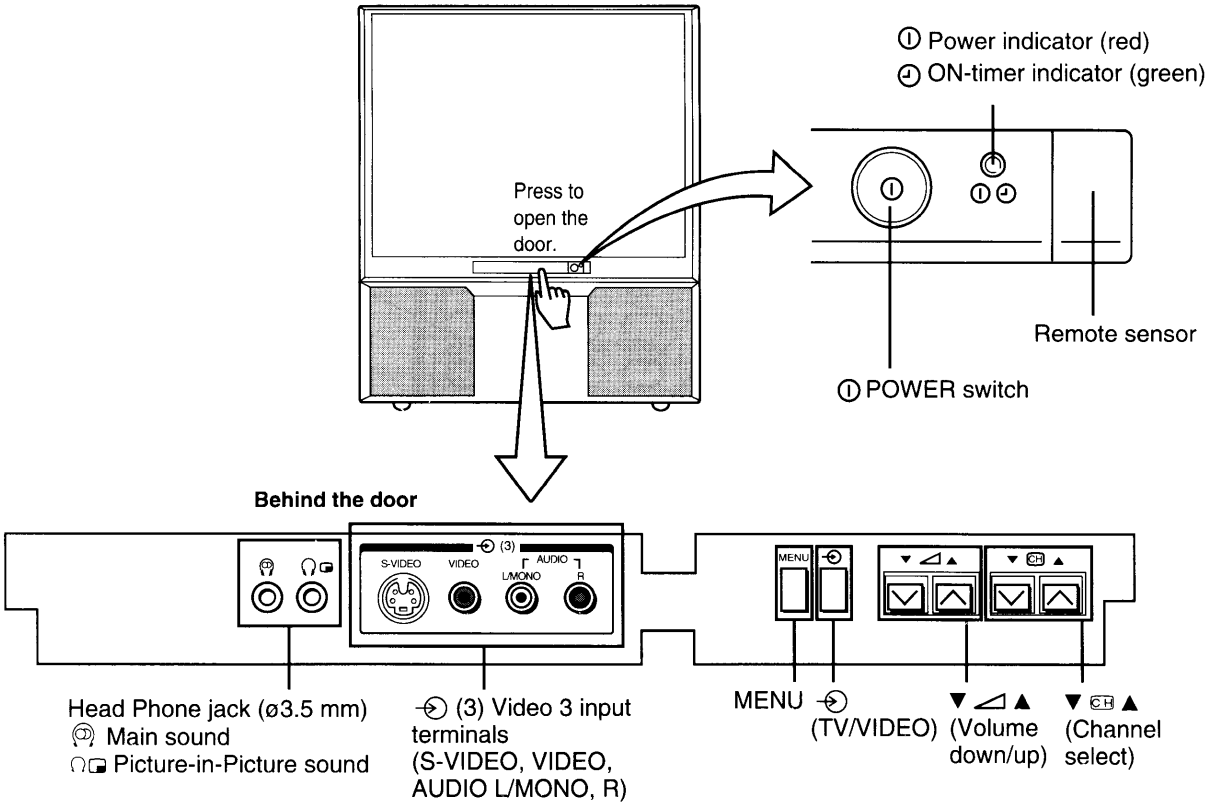
ADJUSTING ITEMS AND DATAS IN THE DESIGN MODE:

Item	Name of adjustment	Preset Data	UXH	UXE, UXA, UXM	Remarks
RCUT					
OPT1	OPTION 1	12H	13H	13H	
OPT0	OPTION 0	00H	00H	06H	
OSD					
.					
.					
.					
.					
RCUT					

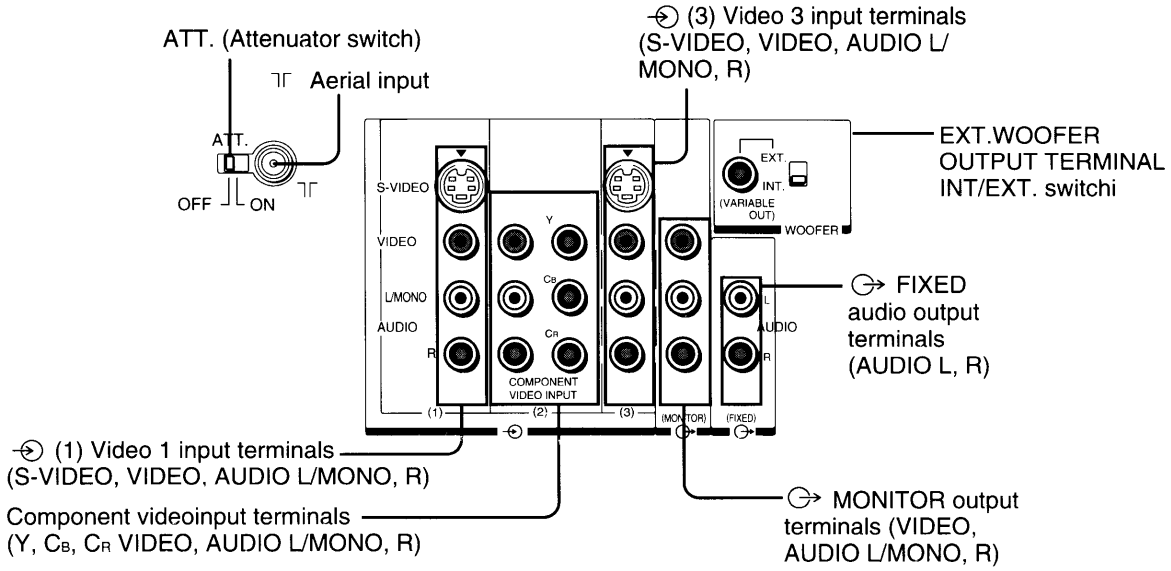
Table-3

LOCATION OF CONTROLS

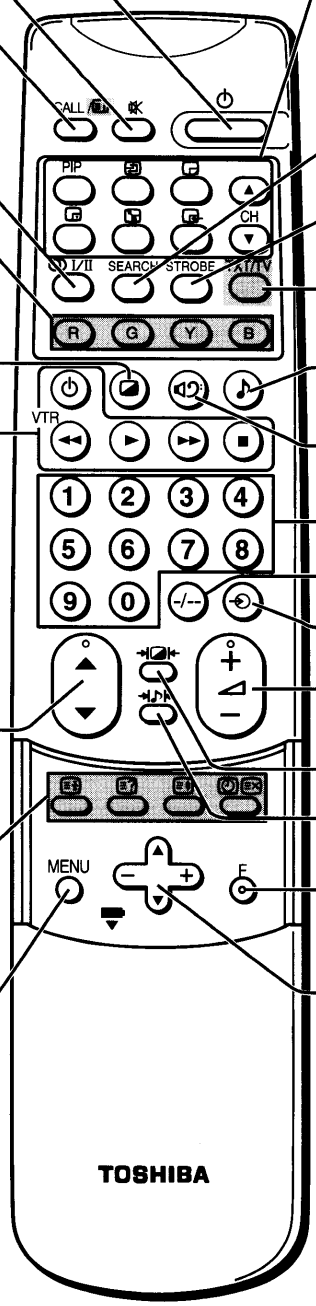
Front



Back



Remote Controller



⏻ Power on/standby

Sound mute

CALL (On-screen call)
(index, initial)

I/II Stereo/bilingual select

Text select
R (Red)
G (Green)
Y (Yellow)
B (Blue)

Picture control

VTR control
⏻ Power on/standby
▶ Play
■ Stop
◀◀ Rewind
▶▶ Fast forward
Toshiba video recorder can be operated with these buttons.

POSITION ▼/▲
Position down/up
(Channel select)

Teletext
Stop
Reveal/conceal
Full/top/bottom
Time/text cancel

MENU
(Menu open/close)

P-in-P
ON/OFF
Input select
Contrast control
Swap
Still
Location

CH ▼/▲ Channel down/up

SEARCH(Multi window on/off)

STROBE(Strobe on/off)

TXT/TV
(Text/mix/TV select)

♪ Sound control

Bass boost

Direct select

-/-- Digit select

TV/VIDEO input select

–/+ Volume down/up
(Level down/up)

Selectable picture

Selectable sound

F (Quick operation)

Menu ▼/▲ menu item select
Menu –/+ menu item adjust

: The buttons marked with are not existence for some model.

PROGRAMMING CHANNEL MEMORY

- First, use the ASM (Automatic Search Memory) function to preset all the active channels in your area automatically.
  Then, arrange the preset channels with the MANUAL SEARCH (>>>), MFT (Manual Fine Tuning) and SKIP functions so that you can tune into only desired channels.
- This section shows how to tune in channels using mainly the Remote Controller. You can also perform the system select, ASM, MANUAL SEARCH (>>>), MFT and SKIP operations using the buttons on the TV set.

To preset channels (ASM)

ASM (Automatic Search Memory)

1 Select the first position number you want the ASM to start presetting from with the **POSITION** ▼/▲ buttons or the direct select buttons.

2 Press the **MENU** button repeatedly to call up the SET UP menu on the screen.

3 Confirm that "COLOR" is set to "AUTO" and "SOUND" is set to proper system.
If not, press the **MENU** ▼/▲ (or position ▼/▲) buttons to move the cursor (▶) to "COLOR" or "SOUND" then press the **MENU** –/+ (or◿ –/+) buttons to select the proper systems.

4 Press the **MENU** ▼/▲ (or position ▼/▲) buttons to move the cursor (▶) to "ASM".

5 Press the **MENU** + (or◿ +) button to start the ASM. All active channels will be preset automatically.
When presetting is complete, the initial position number will reappear.

After presetting
Check the preset channels by pressing the **POSITION** ▼/▲ buttons.

- If the picture or sound of a certain channel is not good, re-tune the channel using the ASM, MANUAL SEARCH (>>>) or MFT function.
- If the colour of a certain channel is abnormal, the automatic colour system selection (AUTO) may have malfunctioned, or sound system selection is wrong. In such a case, select another colour and/or sound system.

MFT (Manual Fine Tuning)

The adjustments below are not necessary under normal conditions. However, in areas of inferior broadcast conditions where adjustment is necessary for a better picutre, adjust the tuning with the MFT (Manual Fine Tuning).

1 Select the channel you want to fine-tune with the **POSITION** ▼/▲ buttons or direct select buttons.

2 Press the **MENU** button repeatedly to call up the SET UP menu on the screen.

3 Press the **MENU** ▼/▲ (or position ▼/▲) buttons to move the cursor (▶) to "MFT".

4 Press the **MENU** –/+ (or◿ –/+) buttons until the best possible picture and sound are obtained.
[–]DOWN or [+]UP is highlighted while tuning in.

- Use the MANUAL SEARCH (>>>) function if desired channels cannot be preset with the ASM or if you would like to preset channels to specific position numbers one by one.
- It is convenient to set the channel numbers to the same position numbers using MANUAL SEARCH (>>>) and SKIP functions.

To preset channels (Manual search) and skip unnecessary position numbers

Manual search (>>>)

1 Select a desired position number with the **POSITION** ▼/▲ or direct select buttons.

2 Press the **MENU** button repeatedly to call up the SET UP menu on the screen.

3 Press the **MENU** ▼/▲ (or position ▼/▲) buttons to move the cursor (▶) to " >>> ".

4 Press the **MENU** –/+ (or◿ –/+)buttons to start searching. The **MENU** – (or◿ –) button searches for lower-numbered channels; the **MENU** + (or◿ +) button for higher-numbered channels.
Repeat this process until you can get the desired channel.

5 When the desired channel is shown, press the **MENU** ▼/▲ buttons (or position ▼/▲) to move the cursor (▶) to " ⏎ ".

6 Press the **MENU** + (or◿ +) button to store the channel at the current position.

7 When you desire to store another channel at another position, move the cursor (▶) to "POSITION" with the **MENU** ▼/▲ (or position ▼/▲)buttons and select a desired position number with the **MENU** –/+ (or◿ –/+)buttons. Then, press the **MENU** ▼/▲ (or position ▼/▲) buttons to move the cursor (▶) to " >>> " and repeat the steps 4 to 7. Or, repeat the steps 1 to 7 after the display disappears.

To skip a position number

After presetting the channels, you may skip unnecessary position numbers so that only the channels you want to watch are selected.

1 Select the position number to be skipped with the **POSITION** ▼/▲ buttons or direct select buttons.

2 Press the **MENU** button repeatedly to call up the SET UP menu on the screen.

3 Press the **MENU** ▼/▲ (or position ▼/▲) buttons to move the cursor (▶) to "SKIP".

4 Press the **MENU** –/+ (or◿ –/+) buttons to select "SKIP ON".

5 Press the **CALL** button to turn off the SET UP menu display.
Select the position number to be skipped with the direct select buttons. The * mark appears to the left of the position number.
The position number will then be skipped when you select channels with the **POSITION** ▼/▲ buttons.

To restore a skipped position number

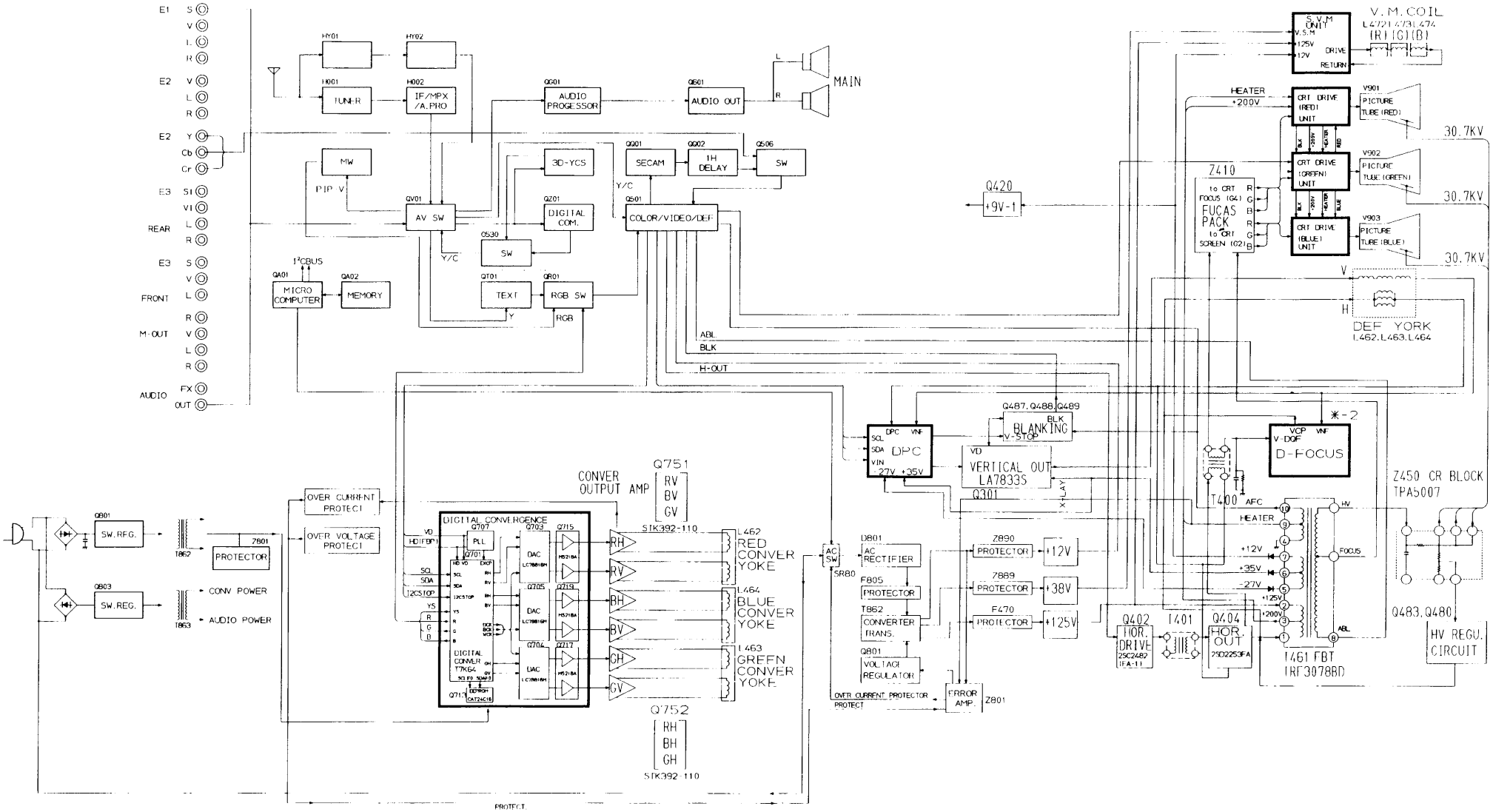
1 Select the position number you want to restore with the direct select buttons.

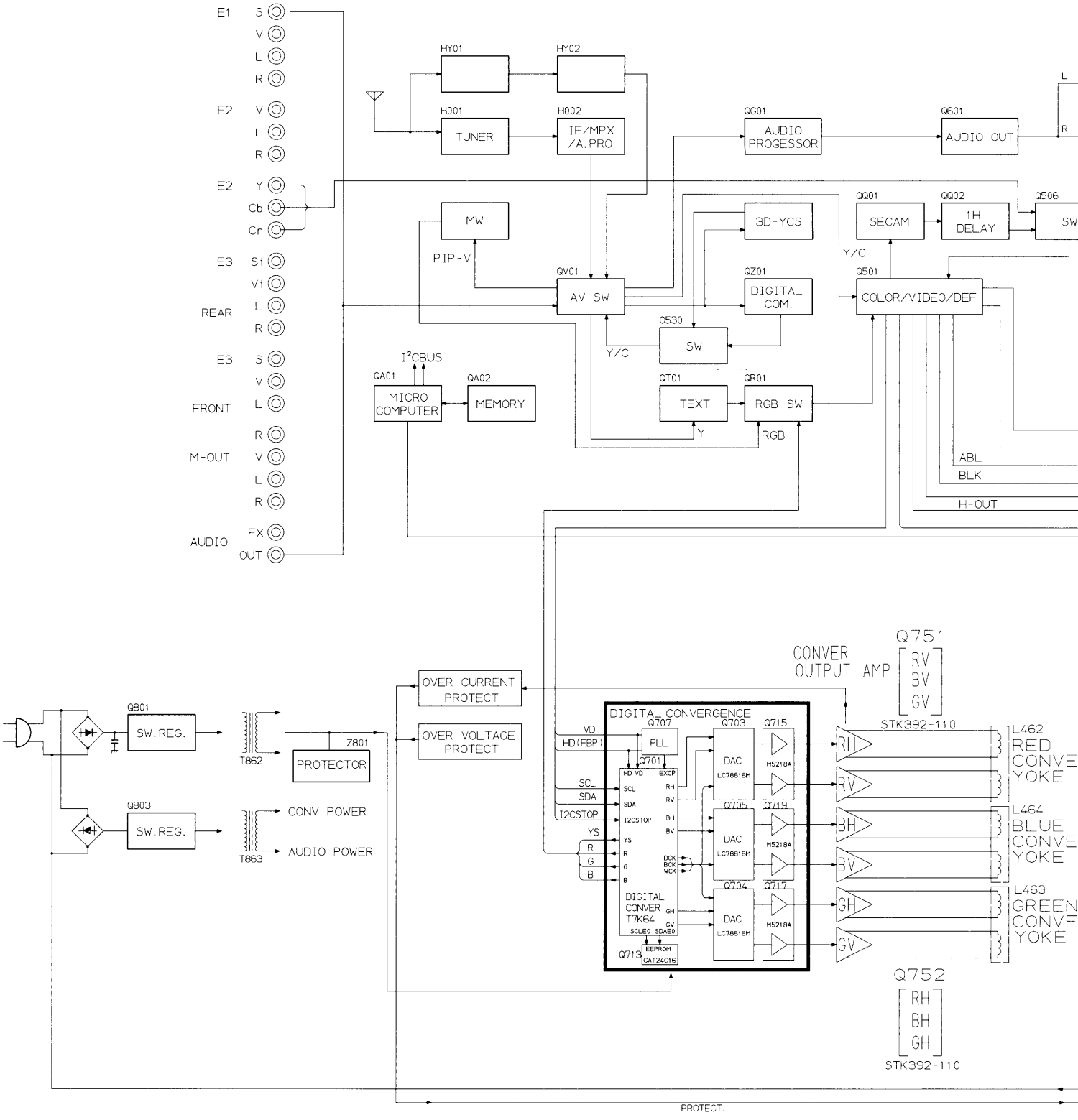
2 Press the **MENU** button to call up the SET UP menu display and press the **MENU** ▼/▲ (or position ▼/▲) buttons to move the cursor (▶) to "SKIP".

3 Press the **MENU** –/+ (or◿ –/+) buttons to select "SKIP OFF".

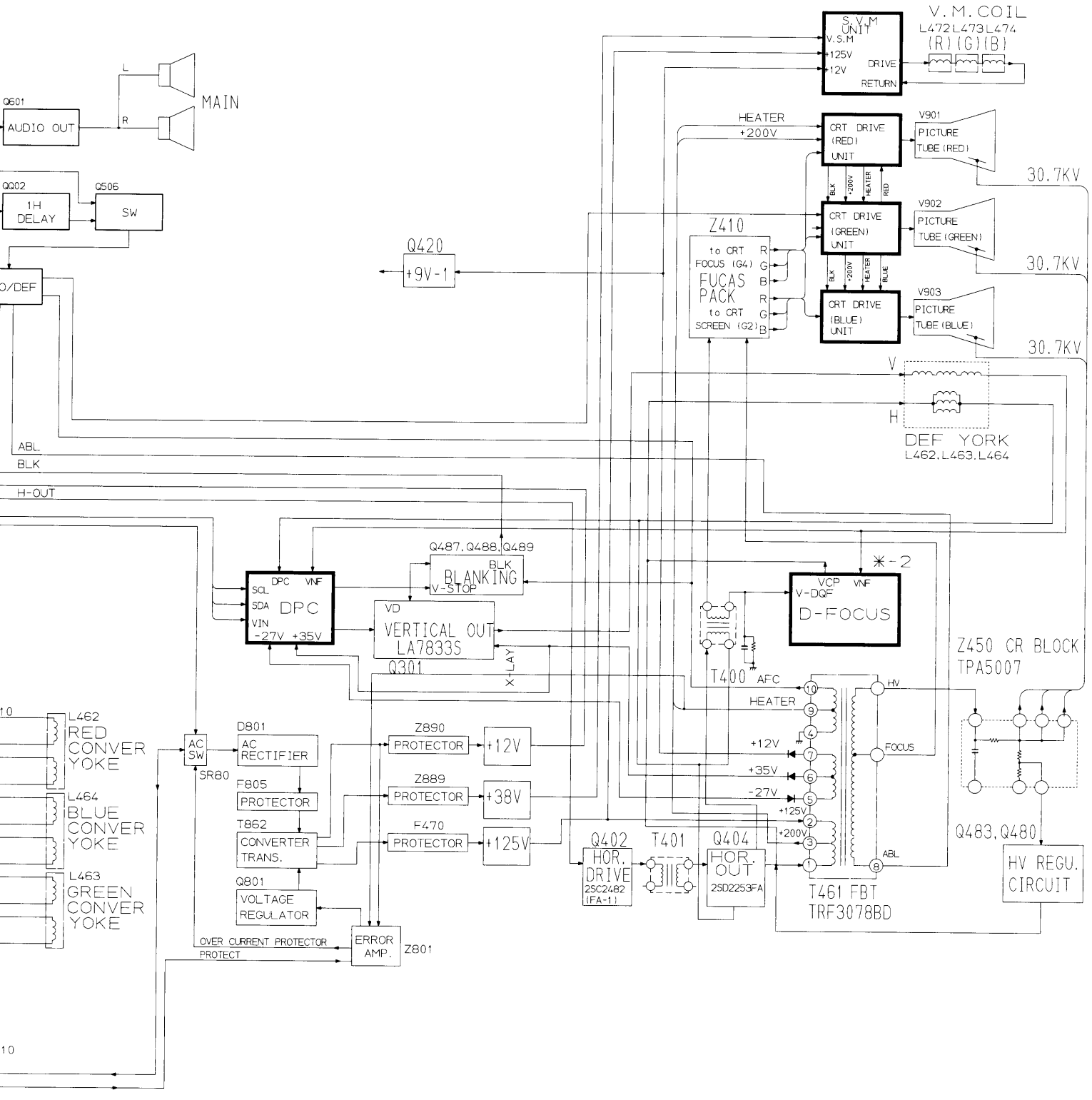
*Please refer to owner's manual in detail.

CIRCUIT BLOCK DIAGRAM




E1
S
V
L
R
E2
V
L
R
E2
Y
Cb
Cr
E3
S1
V1
REAR
L
R
E3
S
V
FRONT
L
R
M-OUT
V
L
R
AUDIO
FX
OUT
HY01
HY02
H001
TUNER
H002
IF/MPX /A.PRO
QG01
AUDIO PROGESSOR
QG01
AUDIO OUT
L
R
MW
PIP-V
3D-YCS
QV01
AV SW
QZ01
DIGITAL COM.
Q530
SW
Y/C
QQ01
SECAM
QQ02
1H DELAY
Q506
SW
Y/C
Q501
COLOR/VIDEO/DEF
ABL
BLK
H-OUT
I²CBUS
QA01
MICRO COMPUTER
QA02
MEMORY
QT01
TEXT
QR01
RGB SW
Y
RGB
Q751
CONVER OUTPUT AMP
RV
BV
GV
STK392-110
Q801
SW.REG.
T862
Z801
PROTECTOR
Q803
SW.REG.
T863
CONV POWER
AUDIO POWER
OVER CURRENT PROTECT
OVER VOLTAGE PROTECT
DIGITAL CONVERGENCE
VD
HD(FBP)
SCL
SDA
I2CSTOP
YS
R
G
B
Q707
PLL
Q701
DIGITAL CONVER T7K64
Q713
EEPROM CAT24C16
Q703
DAC LC78816M
Q705
DAC LC78816M
Q704
DAC LC78816M
Q715
M5218A
Q719
M5218A
Q717
M5218A
RH
RV
BH
BV
GH
GV
L462
RED CONVE YOKE
L464
BLUE CONVE YOKE
L463
GREEN CONVE YOKE
Q752
RH
BH
GH
STK392-110
PROTECT.

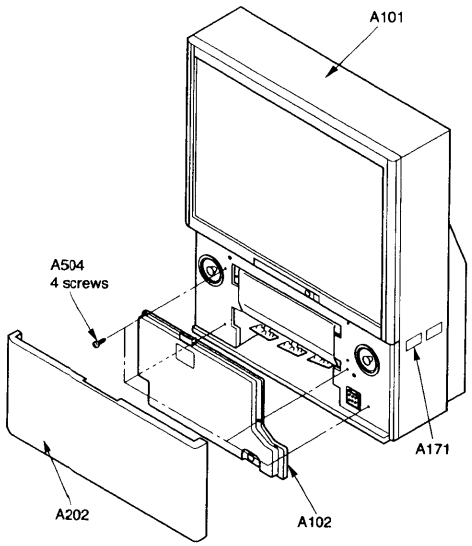
T BLOCK DIAGRAM



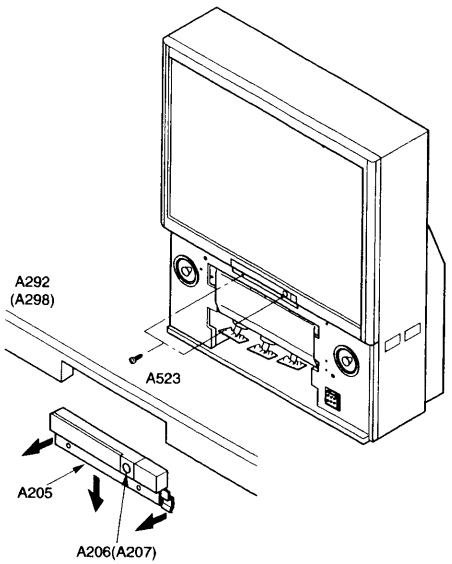
MECHANICAL DISASSEMBLY & CABINET REPLACEMENT PARTS LIST

50"PJTV

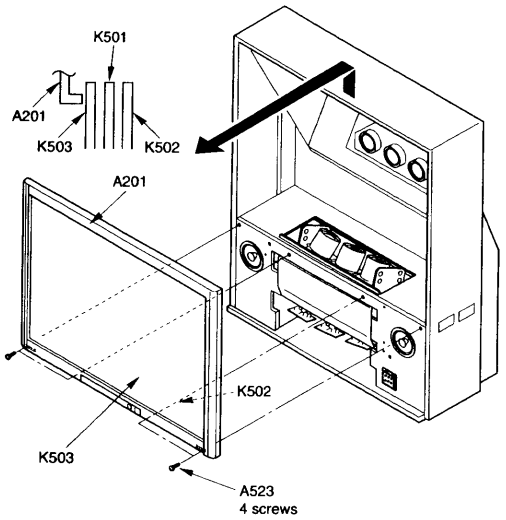
1. Speaker Grille Removal



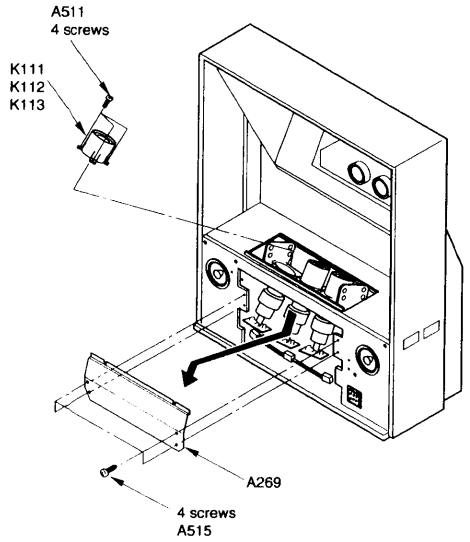
2. Control Panel Removal



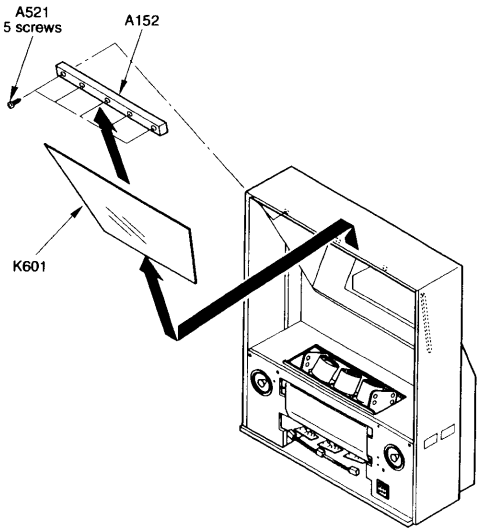
3. Front Mask Removal



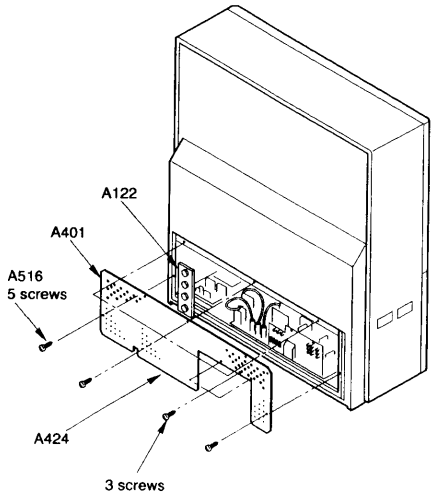
4. Shield Plate, Lens Removal



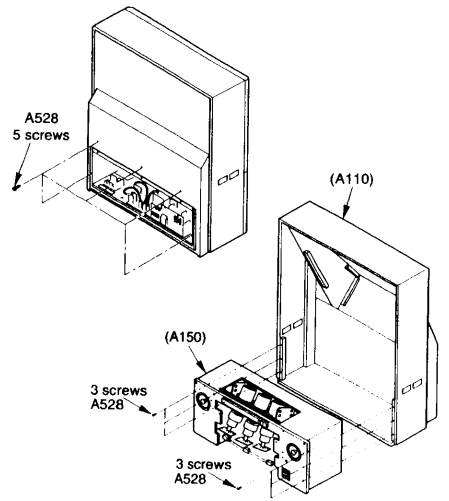
5. Mirror Removal



6. Back Board Removal



7. Light Box Removal

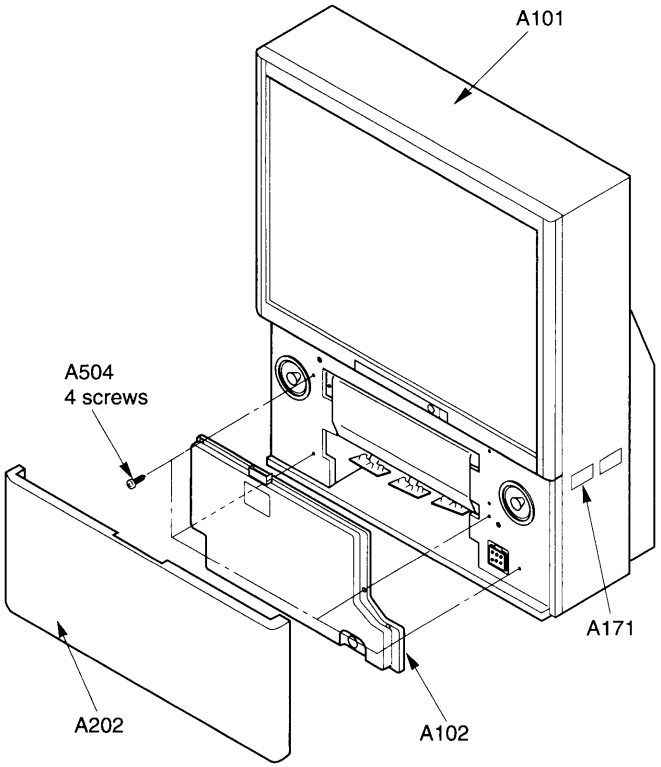


50G9UXE/50G9UXH/50G9UXM/50G9UXA

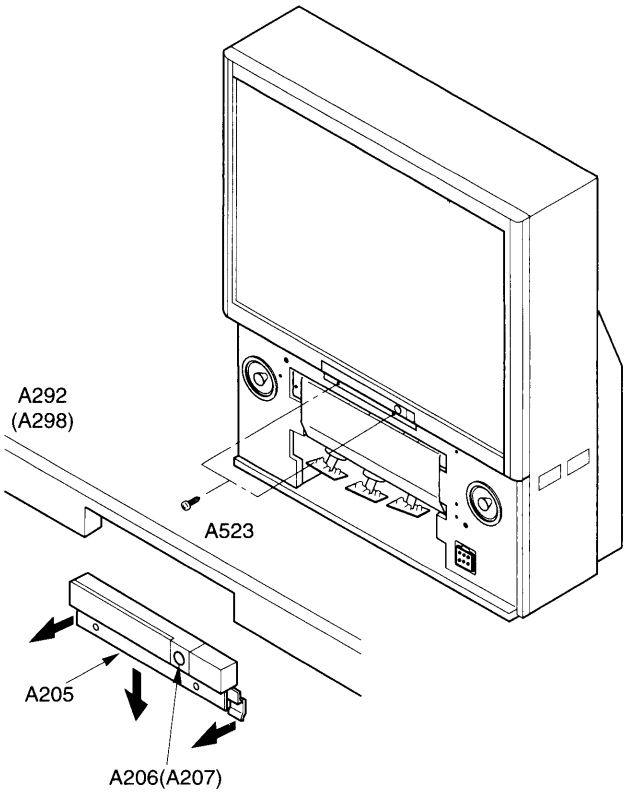
Location No.	Part No.	Description
CABINET PARTS		
A101	23411109	Wood Cabinet
A102	23421707	Front Cover
A122	23845485	Band, Safety
A151	23525778	Case, Bottom
A152	23935841	Packing, Bottom
A166	23730162	Screw, Wood
A169	23730162	Screw, Wood
A171	23805157	Handle
A175	23436661	Caster
A201	23549129	Bezel, SCREEN 50
A202	23527057	Speaker Grille 50
A205	23885270	Control Panel
A206	23445114	Button, Power
A207	23836498	Spring, Coil
A292	23421833	Door, Proper
A298	23451976	Push Catch
⚠A401	23822829	Back Board
A505	72471068	Screw, BIDT2 4X12BZ
A506	23035412	Screw, BTB4X12SZN
A507	23035412	Screw, BTB4X12SZN
A509	23035412	Screw, BTB4X12SZN
A519	72471068	Screw, BIDT2 4X12BZ
A520	23037310	Screw, BTBW3X10 SZN
A521	23035412	Screw, BTB4X12SZN
A527	23035412	Screw, BTB4X12SZN
A529	23035412	Screw, BTB4X12SZN
A530	23035412	Screw, BTB4X12SZN
A701	23525779	Case(50G9UXE)
A701	23525825	Case(50G9UXH)
A701	23525826	Case(50G9UXM)
A701	23525824	Case(50G9UXA)
A702	23935842	Packing, Top
A703	23845450	Joint
K501	23837513	Lenti Sheet, SCREEN50KH-L
K502	23837514	Fresnel Sheet, SCREEN50KH-F
K503	23837532	Contrast Screen, SCR50DH

50"PJTV

1. Speaker Grille Removal

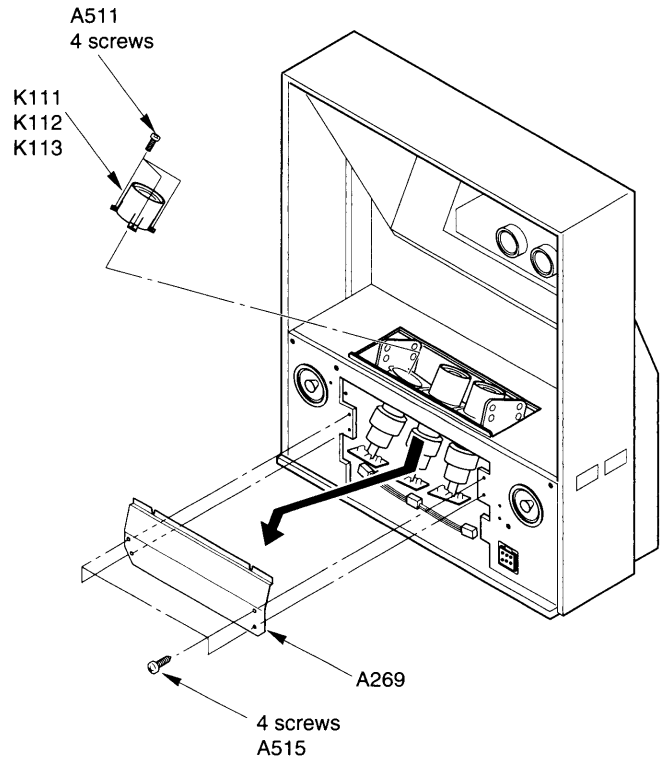


2. Control Panel Removal

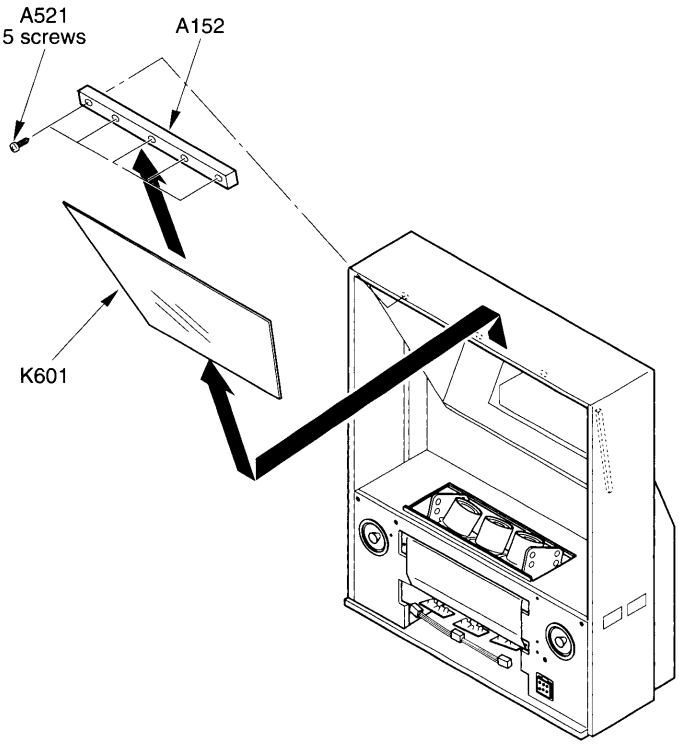


3. Fr

4. Shield Plate, Lens Removal



5. Mirror Removal



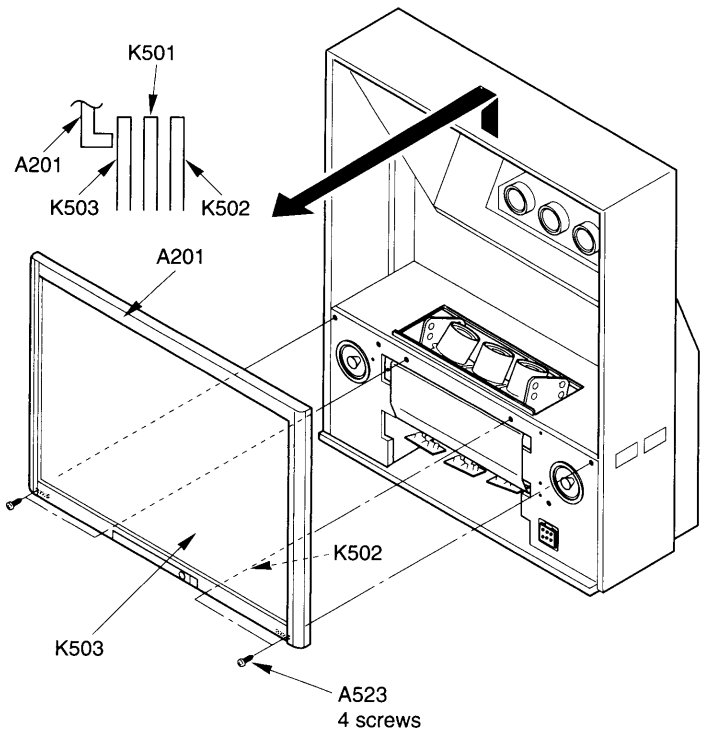
6. Ba

& CABINET REPLACEMENT PARTS LIST

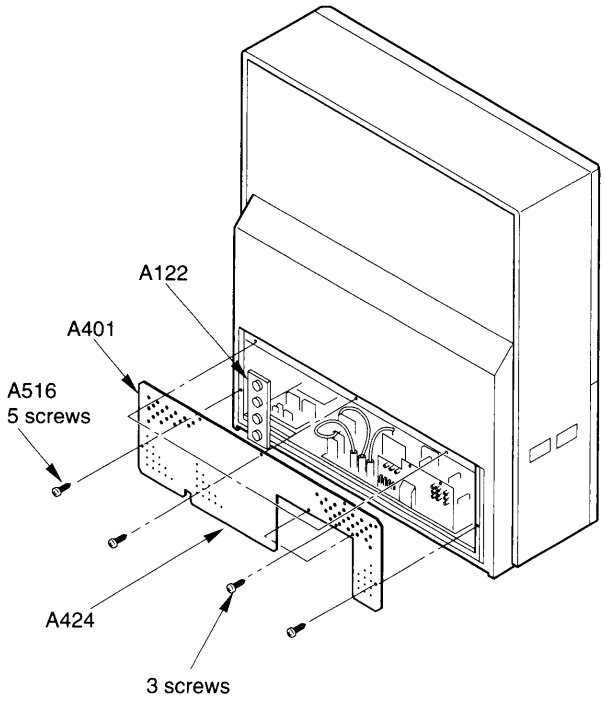
50G9UXE/50G9UXH/50G9UXM/50G9UXA

Location No.	Part No.	Description
CABINET PARTS		
A101	23411109	Wood Cabinet
A102	23421707	Front Cover
A122	23845485	Band, Safety
A151	23525778	Case, Bottom
A152	23935841	Packing, Bottom
A166	23730162	Screw, Wood
A169	23730162	Screw, Wood
A171	23805157	Handle
A175	23436661	Caster
A201	23549129	Bezel, SCREEN 50
A202	23527057	Speaker Grille 50
A205	23885270	Control Panel
A206	23445114	Button, Power
A207	23836498	Spring, Coil
A292	23421833	Door, Proper
A298	23451976	Push Catch
⚠A401	23822829	Back Board
A505	72471068	Screw, BIDT2 4X12BZ
A506	23035412	Screw, BTB4X12SZN
A507	23035412	Screw, BTB4X12SZN
A509	23035412	Screw, BTB4X12SZN
A519	72471068	Screw, BIDT2 4X12BZ
A520	23037310	Screw, BTBW3X10 SZN
A521	23035412	Screw, BTB4X12SZN
A527	23035412	Screw, BTB4X12SZN
A529	23035412	Screw, BTB4X12SZN
A530	23035412	Screw, BTB4X12SZN
A701	23525779	Case(50G9UXE)
A701	23525825	Case(50G9UXH)
A701	23525826	Case(50G9UXM)
A701	23525824	Case(50G9UXA)
A702	23935842	Packing, Top
A703	23845450	Joint
K501	23837513	Lenti Sheet, SCREEN50KH-L
K502	23837514	Fresnel Sheet, SCREEN50KH-F
K503	23837532	Contrast Screen, SCR50DH

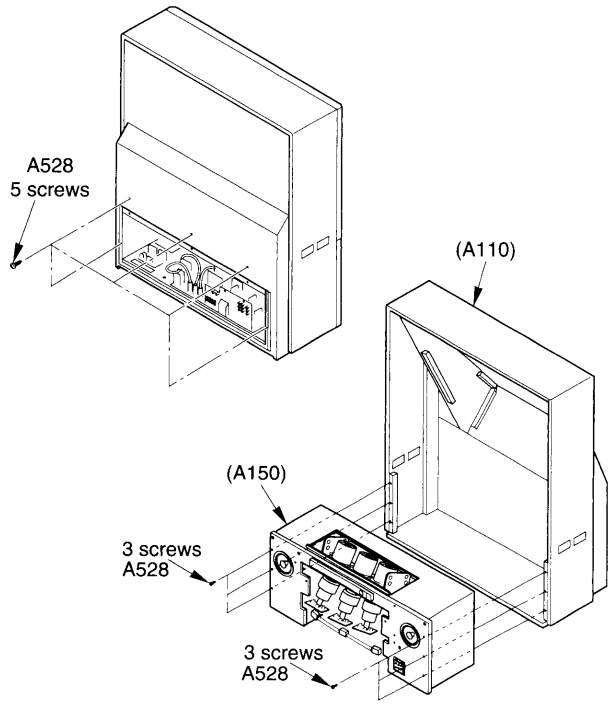
3. Front Mask Removal



6. Back Board Removal



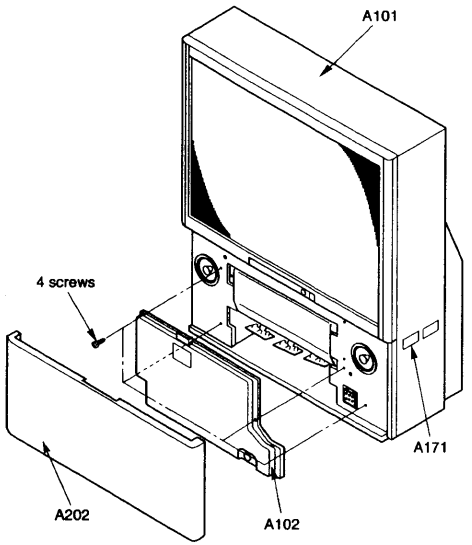
7. Light Box Removal



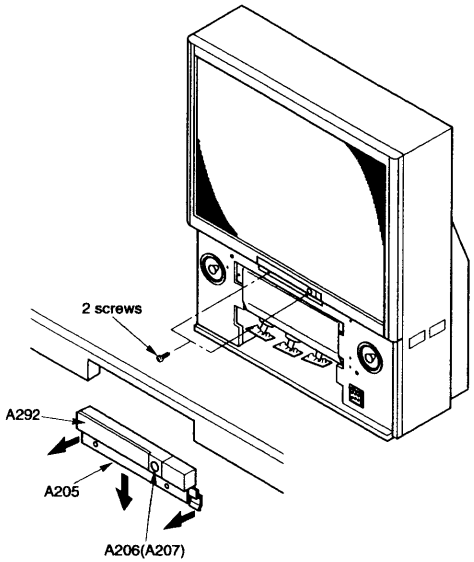
MECHANICAL DISASSEMBLY & CABINET REPLACEMENT PARTS LIST

61"PJTV

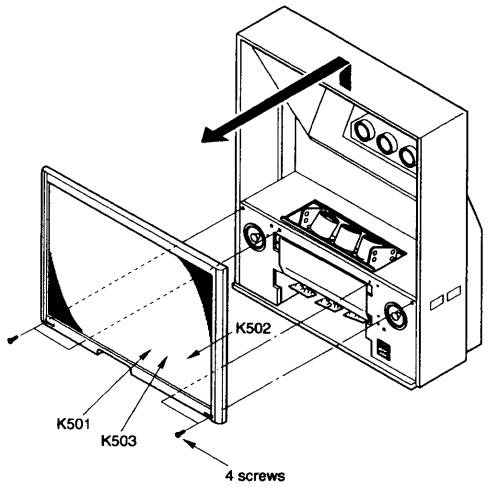
1. Speaker Grille Removal



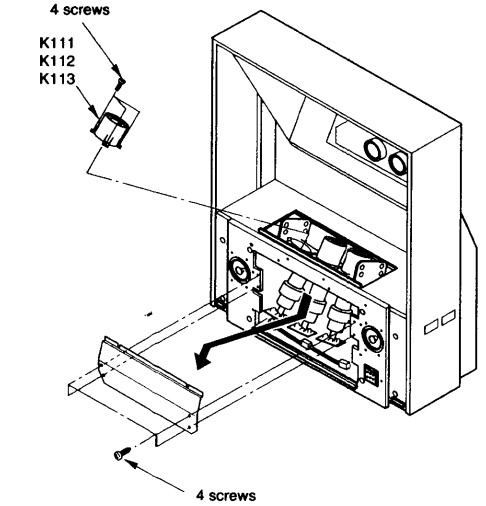
2. Control Panel Removal



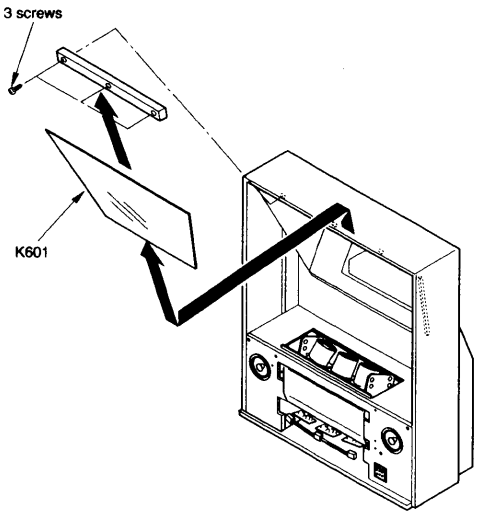
3. Front Mask Removal



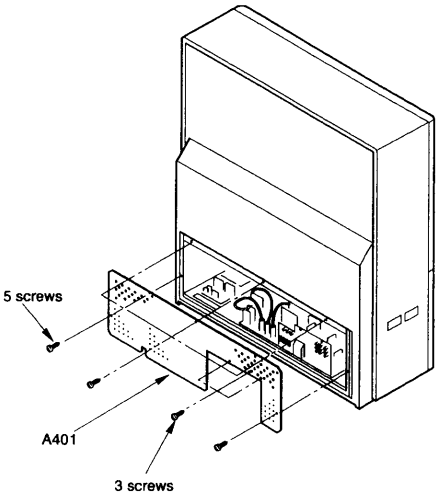
4. Shield Plate, Lens Removal



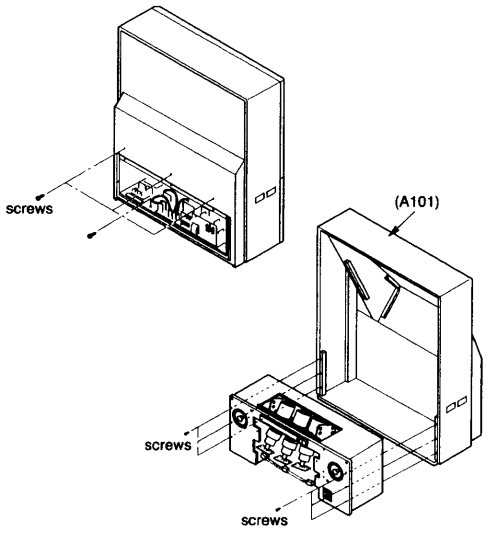
5. Mirror Removal



6. Back Board Removal



7. Light Box Removal

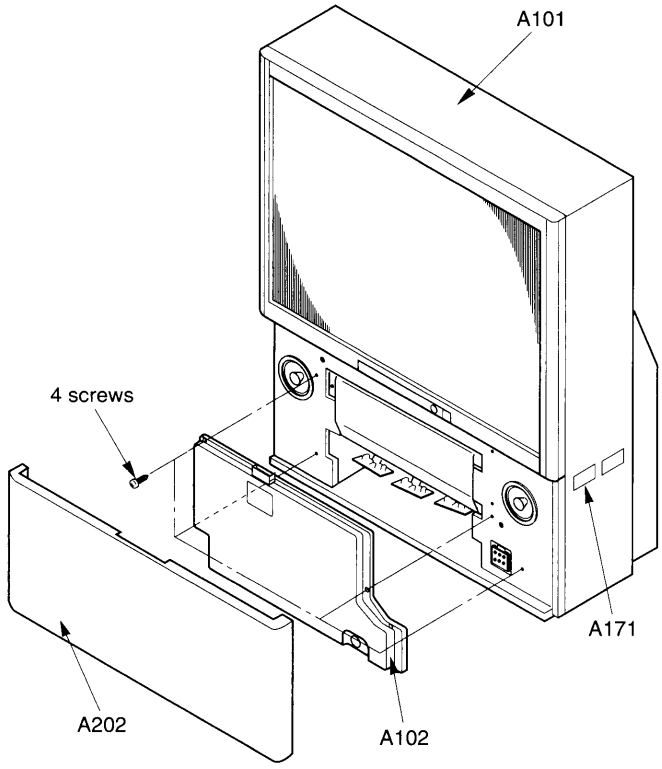


61G9UXE/61G9UXH/61G9UXM/61G9UXA

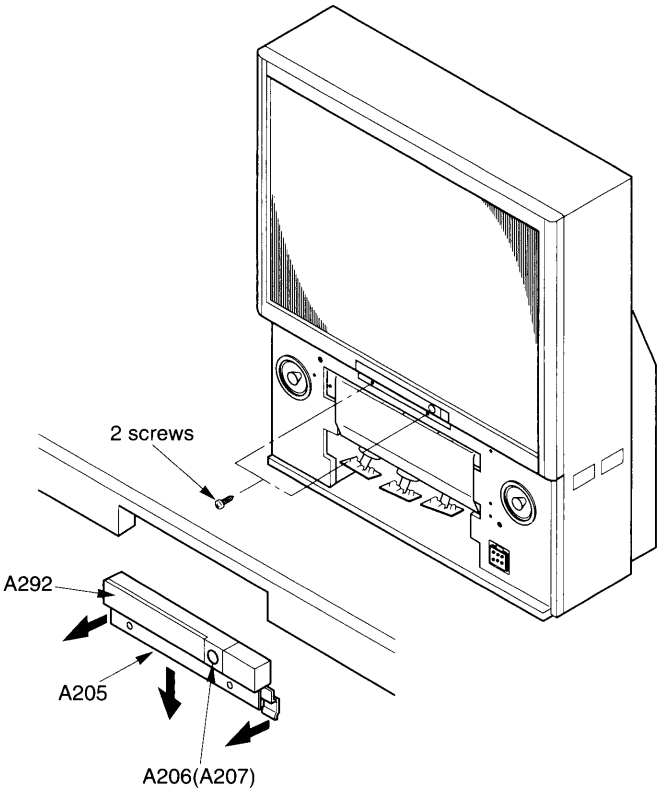
Location No.	Part No.	Description
CABINET PARTS		
A101	23411129	Wood Cabinet
A102	23421707	Front Cover
A122	23845485	Band, Safety
A151	23525399	Case, Bottom
A152	23935694	Packing, Bottom
A166	23730162	Screw, Wood
A169	23730162	Screw, Wood
A171	23805157	Handle
A175	23436661	Caster
A201	23519797	Bezel, SCREEN 61
A202	23527059	Speaker Grille 61
A205	23885270	Control Panel
A206	23445114	Button, Power
A207	23836498	Spring, Coil
A292	23421833	Door, Proper
A298	23451976	Push Catch
⚠A401	23822930	Back Board
A505	72471068	Screw, BIDT2 4X12BZ
A506	23035412	Screw, BTB4X12SZN
A507	23035412	Screw, BTB4X12SZN
A509	23035412	Screw, BTB4X12SZN
A519	72471068	Screw, BIDT2 4X12BZ
A520	23037310	Screw, BTBW3X10 SZN
A521	23035412	Screw, BTB4X12SZN
A527	23035412	Screw, BTB4X12SZN
A529	23035412	Screw, BTB4X12SZN
A530	23035412	Screw, BTB4X12SZN
A701	23525836	Case(61G9UXE)
A701	23525837	Case(61G9UXH)
A701	23525840	Case(61G9UXM)
A701	23525808	Case(61G9UXA)
A702	23935686	Packing, Top
A703	23845450	Joint
K501	23837538	Lenti Sheet, SCREEN61KH-L
K502	23837539	Fresnel Sheet, SCREEN61KH-F
K503	23837532	Contrast Screen, SCR50DH

61"PJTV

1. Speaker Grille Removal

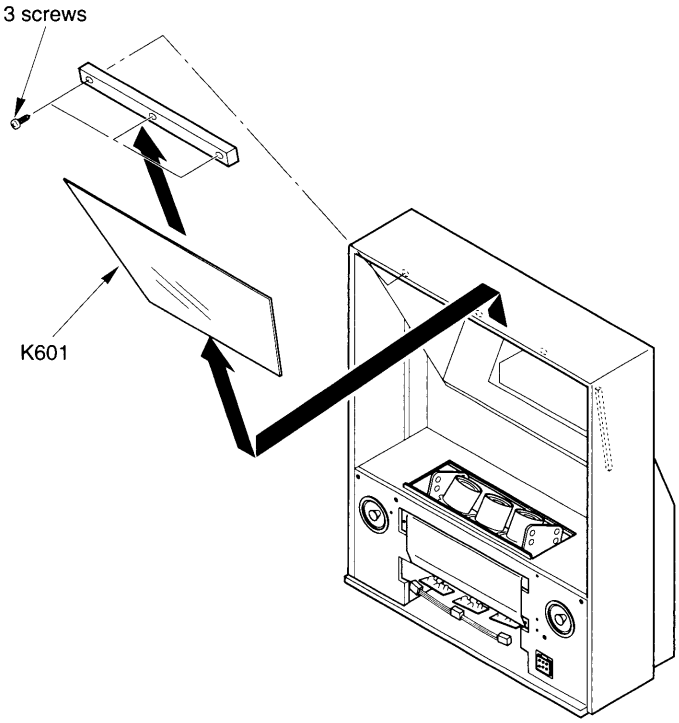


2. Control Panel Removal

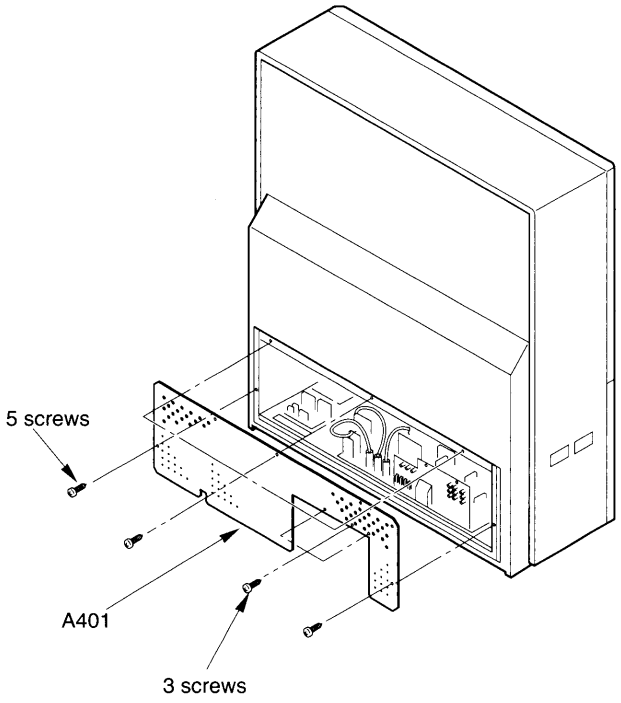


3. Front

5. Mirror Removal



6. Back Board Removal

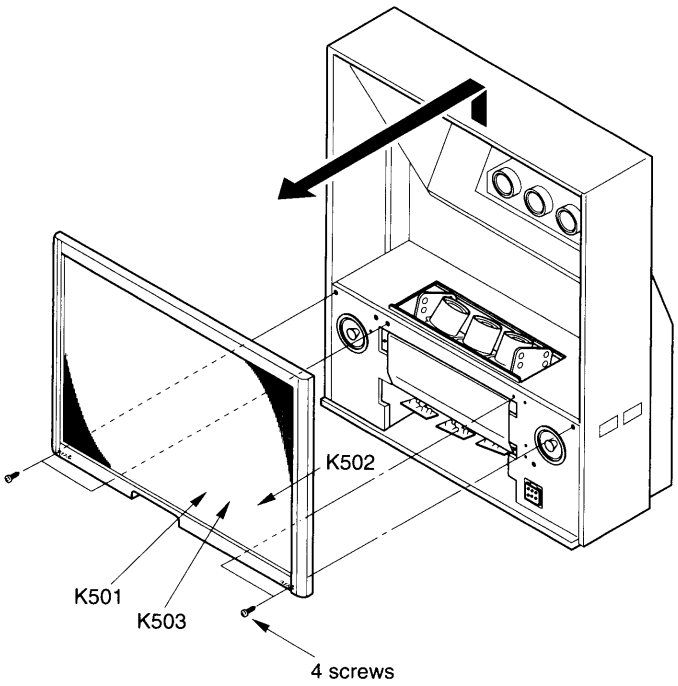


7. Light

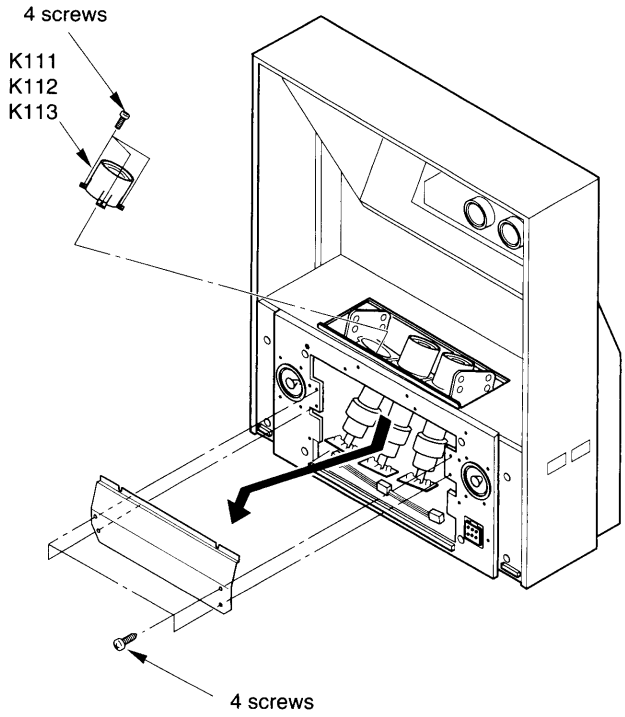
screws

CABINET REPLACEMENT PARTS LIST

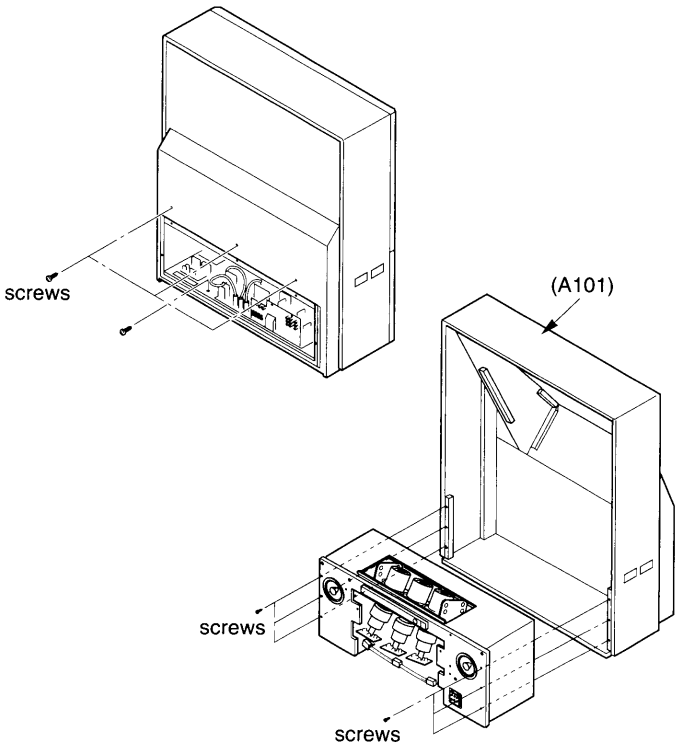
3. Front Mask Removal



4. Shield Plate, Lens Removal



7. Light Box Removal



61G9UXE/61G9UXH/61G9UXM/61G9UXA

Location No.	Part No.	Description
CABINET PARTS		
A101	23411129	Wood Cabinet
A102	23421707	Front Cover
A122	23845485	Band, Safety
A151	23525399	Case, Bottom
A152	23935694	Packing, Bottom
A166	23730162	Screw, Wood
A169	23730162	Screw, Wood
A171	23805157	Handle
A175	23436661	Caster
A201	23519797	Bezel, SCREEN 61
A202	23527059	Speaker Grille 61
A205	23885270	Control Panel
A206	23445114	Button, Power
A207	23836498	Spring, Coil
A292	23421833	Door, Proper
A298	23451976	Push Catch
⚠A401	23822930	Back Board
A505	72471068	Screw, BIDT2 4X12BZ
A506	23035412	Screw, BTB4X12SZN
A507	23035412	Screw, BTB4X12SZN
A509	23035412	Screw, BTB4X12SZN
A519	72471068	Screw, BIDT2 4X12BZ
A520	23037310	Screw, BTBW3X10 SZN
A521	23035412	Screw, BTB4X12SZN
A527	23035412	Screw, BTB4X12SZN
A529	23035412	Screw, BTB4X12SZN
A530	23035412	Screw, BTB4X12SZN
A701	23525836	Case(61G9UXE)
A701	23525837	Case(61G9UXH)
A701	23525840	Case(61G9UXM)
A701	23525808	Case(61G9UXA)
A702	23935686	Packing, Top
A703	23845450	Joint
K501	23837538	Lenti Sheet, SCREEN61KH-L
K502	23837539	Fresnel Sheet, SCREEN61KH-F
K503	23837532	Contrast Screen, SCR50DH

CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE . Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with * mark is no longer available after the end of the production.*

ABBREVIATIONS:

Capacitors	CD	:	Ceramic Disk	PF	:	Plastic Film	EL	: Electrolytic
Resistors	CF	:	Carbon Film	CC	:	Carbon Composition	MF	: Metal Film
	OMF	:	Oxide Metal Film	VR	:	Variable Resistor	FR	: Fusible Resistor

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Models : 50G9UXE, 50G9UXH, 50G9UXM, 50G9UXA, 61G9UXE, 61G9UXH, 61G9UXM, 61G9UXA

Location No.	Part No.	Description
CAPACITORS		
C101	24796479	EL, 4.7μF, ±20%, 35V
C102	24763221	EL, 220μF, ±20%, 16V
C103	24212103	CD, 0.01μF, ±10%
C104	24794470	EL, 47μF, ±20%, 16V
C105	24212102	CD, 1000pF, ±10%
C106	24797100	EL, 10μF, ±20%, 50V
C107	24763221	EL, 220μF, ±20%, 16V
C108	24232103	CD, 0.01μF, +80%, −20%
C109	24232103	CD, 0.01μF, +80%, −20%
C111	24763221	EL, 220μF, ±20%, 16V
C112	24212102	CD, 1000pF, ±10%
C113	24232103	CD, 0.01μF, +80%, −20%
C114	24763101	EL, 100μF, ±20%, 16V
C115	24232103	CD, 0.01μF, +80%, −20%
C116	24232103	CD, 0.01μF, +80%, −20%
C117	24797479	EL, 4.7μF, ±20%, 50V
C118	24797479	EL, 4.7μF, ±20%, 50V
C190	24232103	CD, 0.01μF, +80%, −20%
C201	24794100	EL, 10μF, ±20%, 16V
C203	24567104	PF, 0.1μF
C204	24797010	EL, 1μF, ±20%, 50V
C205	24206229	EL, 2.2μF, 50V
C206	24794100	EL, 10μF, ±20%, 16V
C207	24436390	CD, 39pF
C208	24436390	CD, 39pF
C209	24436390	CD, 39pF
C212	24794100	EL, 10μF, ±20%, 16V
C213	24591334	PF, 0.33μF
C260	24085967	EL, 47μF, ±20%, 16V, Non-Polar
C303	24214471	CD, 470pF, ±10%, 500V
C305	24617912	EL, 2.2μF, ±10%, 50V
C306	24617858	EL, 3300μF, ±20%, 35V
C307	24693473	PF, 0.047μF, 100V
C308	24668221	EL, 220μF, ±20%, 35V
C309	24212101	CD, 100pF, ±10%
C310	24669222	EL, 2200μF, ±20%, 50V
C311	24214561	CD, 560pF, ±10%, 500V
C313	24082057	PF, 0.22μF, 100V
C314	24591103	PF, 0.01μF

Location No.	Part No.	Description
C315	24797229	EL, 2.2μF, ±20%, 50V
C315	24591103	PF, 0.01μF
C316	24591102	PF, 1000pF
C317	24591103	PF, 0.01μF
C318	24617026	EL, 820μF, ±20%, 16V
C319	24591102	PF, 1000pF
C320	24669101	EL, 100μF, ±20%, 50V
C321	24591183	PF, 0.018μF
C322	24617912	EL, 2.2μF, ±10%, 50V
C323	24591224	PF, 0.22μF
C326	24591683	PF, 0.068μF
C340	24666100	EL, 10μF, ±20%, 16V
C350	24591104	PF, 0.1μF
C351	24666101	EL, 100μF, ±20%, 16V
C352	24669229	EL, 2.2μF, ±20%, 50V
C360	24667100	EL, 10μF, ±20%, 25V
C361	24669100	EL, 10μF, ±20%, 50V
C362	24591104	PF, 0.1μF
C363	24085946	EL, 10μF, ±20%, 16V, NP
C364	24666100	EL, 10μF, ±20%, 16V
C370	24669101	EL, 100μF, ±20%, 50V
C371	24668100	EL, 10μF, ±20%, 35V
C401	24567104	PF, 0.1μF
C403	24829124	PF, 0.12μF, 400V
C403	24591203	PF, 0.02μF
C404	24797229	EL, 2.2μF, ±20%, 50V
C413	24214821	CD, 820pF, ±10%, 500V
C415	24591392	PF, 3900pF
C416	24678100	EL, 10μF, ±20%, 200V
C417	24214391	CD, 390pF, ±10%, 500V
C418	24095883	PF, 0.015μF, ±3%, 630V
C419	24095803	PF, 0.062μF, 400V
C420	24666101	EL, 100μF, ±20%, 16V
C423	24095779	PF, 0.62μF, 400V
C430	24232103	CD, 0.01μF, +80%, −20%
C431	24794101	EL, 100μF, ±20%, 16V
C440	24082323	PF, 1000pF, ±3%, 1500V
C441	24095787	PF, 0.3μF, 400V
C443	24082348	PF, 6800pF, ±3%, 1500V
C444	24082287	PF, 5100pF, ±3%, 1800V
C445	24828473	PF, 0.047μF, 200V

Location No.	Part No.	Description
C446	24679330	EL, 33μF, ±20%, 250V
C447	24667102	EL, 1000μF, ±20%, 25V
C448	24640908	EL, 33μF, ±20%, 160V
C458	24667100	EL, 10μF, ±20%, 25V
C459	24669478	EL, 0.47μF, ±20%, 50V
C460	24669331	EL, 330μF, ±20%
C463	24212152	CD, 1500pF, ±10%
C465	24591332	PF, 3300pF
C466	24591394	PF, 0.39μF
C467	24820153	PF, 0.15μF, 630V
C468	24567474	PF, 0.47μF
C471	24669479	EL, 4.7μF, ±20%, 50V
C475	24095887	PF, 0.01μF, ±3%, 630V
C477	24092347	CD, 1500pF, ±10%, 2kV
C481	24567104	PF, 0.1μF
C482	24591152	PF, 1500pF
C483	24567224	PF, 0.22μF
C484	24640872	EL, 10μF, ±20%, 100V
C485	24669101	EL, 100μF, ±20%, 50V
C493	24082054	PF, 0.12μF, 100V
C500	24353010	CD, 1pF, ±0.25pF
C501	24232103	CD, 0.01μF, +80%, −20%
C502	24232103	CD, 0.01μF, +80%, −20%
C503	24763101	EL, 100μF, ±20%, 16V
C504	24591222	PF, 2200pF
C505	24353120	CD, 12pF
C507	24353120	CD, 12pF
C508	24794100	EL, 10μF, ±20%, 16V
C509	24763101	EL, 100μF, ±20%, 16V
C510	24763101	EL, 100μF, ±20%, 16V
C511	24232103	CD, 0.01μF, +80%, −20%
C512	24206228	EL, 0.22μF, 50V
C513	24232103	CD, 0.01μF, +80%, −20%
C514	24567104	PF, 0.1μF
C515	24567104	PF, 0.1μF
C517	24353010	CD, 1pF, ±0.25pF
C520	24436561	CD, 560pF
C521	24353181	CD, 180pF
C522	24212102	CD, 1000pF, ±10%
C523	24212102	CD, 1000pF, ±10%
C524	24436470	CD, 47pF
C525	24436470	CD, 47pF
C526	24436470	CD, 47pF
C527	24232103	CD, 0.01μF, +80%, −20%
C528	24794100	EL, 10μF, ±20%, 16V
C530	24212102	CD, 1000pF, ±10%
C532	24794101	EL, 100μF, ±20%, 16V
C533	24436331	CD, 330pF
C534	24436331	CD, 330pF
C535	24436331	CD, 330pF
C536	24794101	EL, 100μF, ±20%, 16V
C537	24232103	CD, 0.01μF, +80%, −20%
C538	24794100	EL, 10μF, ±20%, 16V
C541	24794470	EL, 47μF, ±20%, 16V
C601	24591102	PF, 1000pF
C602	24591102	PF, 1000pF
C603	24797100	EL, 10μF, ±20%, 50V
C604	24797100	EL, 10μF, ±20%, 50V
C605	24795101	EL, 100μF, ±20%, 25V
C606	24795101	EL, 100μF, ±20%, 25V
C607	24591104	PF, 0.1μF
C608	24591104	PF, 0.1μF
C609	24669102	EL, 1000μF, ±20%, 50V
C610	24669102	EL, 1000μF, ±20%, 50V

Location No.	Part No.	Description
C611	24795221	EL, 220μF, ±20%, 25V
C612	24763471	EL, 470μF, ±20%, 16V
C613	24797478	EL, 0.47μF, ±20%, 50V
C614	24797478	EL, 0.47μF, ±20%, 50V
C615	24232103	CD, 0.01μF, +80%, −20%
C664	24797479	EL, 4.7μF, ±20%, 50V
C680	24073095	EL, 2200μF, ±20%, 50V
C681	24591104	PF, 0.1μF
C772	24667101	EL, 100μF, ±20%, 25V
C776	24667101	EL, 100μF, ±20%, 25V
⚠ C801	24082374	PF, 0.22μF, AC250V
⚠ C802	24082374	PF, 0.22μF, AC250V
⚠ C804	24082374	PF, 0.22μF, AC250V
C805	24092281	CD, 4700pF, ±20%, AC250V
C806	24092281	CD, 4700pF, ±20%, AC250V
C808	24617821	EL, 220μF, ±20%, 50V
C810	24086043	EL, 820μF, ±20%, 450V
⚠ C811	24092570	CD, 3300pF, ±20%, AC250V
C812	24617817	EL, 22μF, ±20%, 50V
C812	24094654	CD, 470pF, ±20%, AC400V
C813	24567474	PF, 0.47μF
⚠ C814	24092568	CD, 1500pF, ±20%, AC250V
C815	24094655	CD, 1000pF, ±20%, AC400V
C816	24617822	EL, 330μF, ±20%, 50V
C817	24092341	CD, 470pF, ±10%, 2kV
C818	24095931	PF, 2200pF, 1250V
⚠ C819	24094654	CD, 470pF, ±20%, AC400V
C820	24092343	CD, 680pF, ±10%, 2kV
C821	24082374	PF, 0.22μF, AC250V
⚠ C824	24082374	PF, 0.22μF, AC250V
C829	24590152	PF, 1500pF
C832	24539334	PF, 0.33μF
C833	24539104	PF, 0.1μF
C833	24640860	EL, 2.2μF, ±20%, 100V
C834	24797100	EL, 10μF, ±20%, 50V
C835	24203470	EL, 47μF, ±20%, 16V
C836	24232103	CD, 0.01μF, +80%, −20%
C837	24567334	PF, 0.33μF
C837	24669229	EL, 2.2μF, ±20%, 50V
C838	24794101	EL, 100μF, ±20%, 16V
C839	24797100	EL, 10μF, ±20%, 50V
C840	24794470	EL, 47μF, ±20%, 16V
C841	24640891	EL, 22μF, ±20%, 100V
C842	24567474	PF, 0.47μF
C843	24538474	PF, 0.47μF
C844	24567334	PF, 0.33μF
C845	24203101	EL, 100μF, ±20%, 16V
C846	24567104	PF, 0.1μF
C847	24669470	EL, 47μF, ±20%, 50V
C850	24092281	CD, 4700pF, ±20%, AC250V
C851	24092281	CD, 4700pF, ±20%, AC250V
C852	24092281	CD, 4700pF, ±20%, AC250V
C853	24092281	CD, 4700pF, ±20%, AC250V
C854	24086936	EL, 270μF, ±20%, 450V
C855	24092341	CD, 470pF, ±10%, 2kV
C856	24095913	PF, 1500pF, ±3%, 1600V
C857	24617864	EL, 220μF, ±20%, 50V
C860	24640893	EL, 47μF, ±20%, 100V
C861	24640891	EL, 22μF, ±20%, 100V
C862	24590152	PF, 1500pF
⚠ C863	24094655	CD, 1000pF, ±20%, AC400V
⚠ C864	24094655	CD, 1000pF, ±20%, AC400V
C865	24214331	CD, 330pF, ±10%, 500V
C866	24214331	CD, 330pF, ±10%, 500V

Location No.	Part No.	Description
C867	24214471	CD, 470pF, ±10%, 500V
C868	24214471	CD, 470pF, ±10%, 500V
C869	24640893	EL, 47μF, ±20%, 100V
C870	24617809	EL, 3300pF, ±20%, 35V
C871	24617809	EL, 3300pF, ±20%, 35V
C872	24214471	CD, 470pF, ±10%, 500V
C873	24617824	EL, 1000μF, ±20%, 50V
C874	24214471	CD, 470pF, ±10%, 500V
C875	24567563	PF, 0.056μF
C876	24617816	EL, 10μF, ±20%, 50V
C877	24617816	EL, 10μF, ±20%, 50V
C878	24567104	PF, 0.1μF
C879	24617816	EL, 10μF, ±20%, 50V
C880	24677470	EL, 47μF, ±20%, 160V
C882	24617816	EL, 10μF, ±20%, 50V
⚠ C883	24094655	CD, 1000pF, ±20%, AC400V
C884	24086942	EL, 330μF, +80%,–20%, 200V
C885	24214471	CD, 470pF, ±10%, 500V
⚠ C886	24094655	CD, 1000pF, ±20%, AC400V
C887	24214471	CD, 470pF, ±10%, 500V
C889	24617825	EL, 2200μF, ±20%, 50V
C890	24617817	EL, 22μF, ±20%, 50V
C893	24092338	CD, 270pF, ±10%, 2kV
C894	24617813	EL, 2.2μF, ±20%, 50V
C895	24640891	EL, 22μF, ±20%, 100V
C897	24073076	EL, 6800μF, ±20%, 35V
C898	24567474	PF, 0.47μF
C899	24214471	CD, 470pF, ±10%, 500V
C901	24211102	CD, 1000pF, ±10%, 2kV
C902	24794100	EL, 10μF, ±20%, 16V
C903	24232103	CD, 0.01μF, +80%, –20%
C904	24436681	CD, 680pF
C911	24211102	CD, 1000pF, ±10%, 2kV
C912	24794100	EL, 10μF, ±20%, 16V
C913	24232103	CD, 0.01μF, +80%, –20%
C914	24436681	CD, 680pF
C915	24679330	EL, 33μF, ±20%, 250V
C915A	23960136	Adhesive, TSE3843-W
C916	24794101	EL, 100μF, ±20%, 16V
C917	24232103	CD, 0.01μF, +80%, –20%
C921	24211102	CD, 1000pF, ±10%, 2kV
C922	24794100	EL, 10μF, ±20%, 16V
C923	24436681	CD, 680pF
C924	24232103	CD, 0.01μF, +80%, –20%
C930	24794470	EL, 47μF, ±20%, 16V
C941	24797478	EL, 0.47μF, ±20%, 50V
C943	24794102	EL, 1000μF, ±20%, 16V
C944	24203100	EL, 10μF, ±20%, 16V
C961	24666101	EL, 100μF, ±20%, 16V
C962	24203100	EL, 10μF, ±20%, 16V
C963	24232103	CD, 0.01μF, +80%, –20%
C964	24232103	CD, 0.01μF, +80%, –20%
C973	24794470	EL, 47μF, ±20%, 16V
C7721	24212102	CD, 1000pF, ±10%
C7722	24436101	CD, 100pF
C7724	24667101	EL, 100μF, ±20%, 25V
C7725	24667101	EL, 100μF, ±20%, 25V
C7726	24212102	CD, 1000pF, ±10%
C7727	24436101	CD, 100pF
C7729	24212102	CD, 1000pF, ±10%
C7730	24436101	CD, 100pF
C7732	24212102	CD, 1000pF, ±10%
C7733	24436101	CD, 100pF
C7735	24667101	EL, 100μF, ±20%, 25V

Location No.	Part No.	Description
C7736	24669101	EL, 100μF, ±20%, 50V
C7737	24212102	CD, 1000pF, ±10%
C7738	24436101	CD, 100pF
C7740	24212102	CD, 1000pF, ±10%
C7741	24436101	CD, 100pF
C7742	24436330	CD, 33pF
C7743	24436330	CD, 33pF
C7747	24667101	EL, 100μF, ±20%, 25V
C7748	24567104	PF, 0.1μF
C7749	24567104	PF, 0.1μF
C7750	24667101	EL, 100μF, ±20%, 25V
C7751	24667101	EL, 100μF, ±20%, 25V
C7752	24567104	PF, 0.1μF
C7753	24567104	PF, 0.1μF
C7754	24667101	EL, 100μF, ±20%, 25V
C7755	24667101	EL, 100μF, ±20%, 25V
C7756	24567104	PF, 0.1μF
C7757	24567104	PF, 0.1μF
C7758	24667101	EL, 100μF, ±20%, 25V
C7760	24667470	EL, 47μF, ±20%, 25V
C7761	24669100	EL, 10μF, ±20%, 50V
C7762	24669100	EL, 10μF, ±20%, 50V
C7763	24667470	EL, 47μF, ±20%, 25V
C7764	24598331	PF, 330pF
C7767	24667470	EL, 47μF, ±20%, 25V
C7768	24567104	PF, 0.1μF
C7769	24232103	CD, 0.01μF, +80%, –20%
C7770	24669470	EL, 47μF, ±20%, 50V
C7771	24567103	PF, 0.01μF
C7773	24669101	EL, 100μF, ±20%, 50V
C7774	24436331	CD, 330pF
C7776	24667470	EL, 47μF, ±20%, 25V
C7777	24232103	CD, 0.01μF, +80%, –20%
C8111	24094654	CD, 470pF, ±20%, AC400V
C8121	24094653	CD, 220pF, ±20%, AC400V
⚠ C8191	24094653	CD, 220pF, ±20%, AC400V
C9098	24669100	EL, 10μF, ±20%, 50V
C9602	24794100	EL, 10μF, ±20%, 16V
CA13	24212101	CD, 100pF, ±10%
CA22	24212101	CD, 100pF, ±10%
CA23	24212101	CD, 100pF, ±10%
CA24	24212101	CD, 100pF, ±10%
CA25	24474101	CD, 100pF, ±10%
CA33	24232103	CD, 0.01μF, +80%, –20%
CA36	24212101	CD, 100pF, ±10%
CA37	24212101	CD, 100pF, ±10%
CA38	24212101	CD, 100pF, ±10%
CA42	24794100	EL, 10μF, ±20%, 16V
CA43	24232103	CD, 0.01μF, +80%, –20%
CA44	24232103	CD, 0.01μF, +80%, –20%
CA68	24794100	EL, 10μF, ±20%, 16V
CA69	24232103	CD, 0.01μF, +80%, –20%
CB01	24794470	EL, 47μF, ±20%, 16V
CB40	24212101	CD, 100pF, ±10%
CB41	24212101	CD, 100pF ±10%
CB61	24591153	PF, 0.015μF
CB90	24232103	CD, 0.01μF, +80%, –20%
CB91	24232103	CD, 0.01μF, +80%, –20%
CC23	24591104	PF, 0.1μF
CC28	24567474	PF, 0.47μF
CC29	24232103	CD, 0.01μF, +80%, –20%
CD80	24203100	EL, 10μF, ±20%, 16V
CG01	24538224	PF, 0.22μF
CG02	24538104	PF, 0.1μF

Location No.	Part No.	Description
CG03	24538104	PF, 0.1μF
CG04	24206010	EL, 1μF, 50V
CG05	24797220	EL, 22μF, ±20%, 50V
CG07	24206010	EL, 1μF, 50V
CG08	24206010	EL, 1μF, 50V
CG09	24206010	EL, 1μF, 50V
CG12	24591273	PF, 0.027μF
CG13	24232103	CD, 0.01μF, +80%, −20%
CG14	24203101	EL, 100μF, ±20%, 16V
CG15	24591822	PF, 8200pF
CG16	24206010	EL, 1μF, 50V
CG17	24591273	PF, 0.027μF
CG18	24591822	PF, 8200pF
CG20	24203100	EL, 10μF, ±20%, 16V
CG24	24474102	CD, 1000pF, ±10%
CG25	24206229	EL, 2.2μF, 50V
CG26	24206229	EL, 2.2μF, 50V
CG30	24203100	EL, 10μF, ±20%, 16V
CG31	24232103	CD, 0.01μF, +80%, −20%
CG32	24232103	CD, 0.01μF, +80%, −20%
CG33	24232103	CD, 0.01μF, +80%, −20%
CQ01	24212102	CD, 1000pF, ±10%
CQ02	24353820	CD, 82pF
CQ03	24212102	CD, 1000pF, ±10%
CQ04	24794100	EL, 10μF, ±20%, 16V
CQ05	24590563	PF, 0.056μF
CQ07	24591203	PF, 0.02μF
CQ08	24590683	PF, 0.068μF
CQ09	24797229	EL, 2.2μF, ±20%, 50V
CQ10	24590223	PF, 0.022μF
CQ11	24797229	EL, 2.2μF, ±20%, 50V
CQ12	24436820	CD, 82pF
CQ13	24797010	EL, 1μF, ±20%, 50V
CQ14	24797010	EL, 1μF, ±20%, 50V
CQ15	24794101	EL, 100μF, ±20%, 16V
CQ16	24232103	CD, 0.01μF, +80%, −20%
CQ17	24353150	CD, 15pF
CQ18	24436820	CD, 82pF
CQ19	24590103	PF, 0.01μF
CQ20	24567104	PF, 0.1μF
CQ21	24794470	EL, 47μF, ±20%, 16V
CQ22	24232103	CD, 0.01μF, +80%, −20%
CQ23	24567104	PF, 0.1μF
CQ24	24567104	PF, 0.1μF
CQ25	24797100	EL, 10μF, ±20%, 50V
CQ26	24567104	PF, 0.1μF
CQ27	24567104	PF, 0.1μF
CQ28	24797478	EL, 0.47μF, ±20%, 50V
CQ29	24794101	EL, 100μF, ±20%, 16V
CQ30	24232103	CD, 0.01μF, +80%, −20%
CQ31	24797478	EL, 0.47μF, ±20%, 50V
CQ32	24590103	PF, 0.01μF
CQ33	24567104	PF, 0.1μF
CQ34	24567104	PF, 0.1μF
CQ35	24206478	EL, 0.47μF, 50V
CQ36	24206478	EL, 0.47μF, 50V
CQ37	24797010	EL, 1μF, ±20%, 50V
CQ38	24797010	EL, 1μF, ±20%, 50V
CQ39	24797010	EL, 1μF, ±20%, 50V
CQ40	24436820	CD, 82pF
CQ41	24436090	CD, 9pF, ±0.25pF
CQ42	24436090	CD, 9pF, ±0.25pF
CQ43	24436090	CD, 9pF, ±0.25pF
CR01	24567104	PF, 0.1μF

Location No.	Part No.	Description
CR02	24567104	PF, 0.1μF
CR03	24567104	PF, 0.1μF
CR05	24232103	CD, 0.01μF, +80%, −20%
CR06	24666100	EL, 10μF, ±20%, 16V
CR12	24206108	EL, 0.1μF, 50V
CR12	24666100	EL, 10μF, ±20%, 16V
CR13	24206108	EL, 0.1μF, 50V
CR14	24206108	EL, 0.1μF, 50V
CR15	24617024	EL, 470μF, ±20%, 16V
CR16	24436470	CD, 47pF
CR95	24212101	CD, 100pF, ±10%
CR96	24212101	CD, 100pF, ±10%
CR97	24212101	CD, 100pF, ±10%
CR98	24212101	CD, 100pF, ±10%
CS01	24206010	EL, 1μF, 50V
CS02	24206010	EL, 1μF, 50V
CS03	24085988	EL, 1μF, ±20%, 50V, Non-Polar
CS05	24206010	EL, 1μF, 50V
CS06	24206010	EL, 1μF, 50V
CS07	24206010	EL, 1μF, 50V
CS08	24206010	EL, 1μF, 50V
CS09	24206010	EL, 1μF, 50V
CS10	24206010	EL, 1μF, 50V
CS11	24232103	CD, 0.01μF, +80%, −20%
CS21	24212152	CD, 1500pF, ±10%
CS22	24212152	CD, 1500pF, ±10%
CS23	24206478	EL, 0.47μF, 50V
CS32	24203100	EL, 10μF, ±20%, 16V
CS33	24203100	EL, 10μF, ±20%, 16V
CS601	24794100	EL, 10μF, ±20%, 16V
CS602	24794100	EL, 10μF, ±20%, 16V
CS605	24797478	EL, 0.47μF, ±20%, 50V
CS669	24212102	CD, 1000pF, ±10%
CS670	24669100	EL, 10μF, ±20%, 50V
CS671	24669100	EL, 10μF, ±20%, 50V
CS672	24212101	CD, 100pF, ±10%
CS673	24212102	CD, 1000pF, ±10%
CS674	24669100	EL, 10μF, ±20%, 50V
CS675	24669100	EL, 10μF, ±20%, 50V
CS676	24669100	EL, 10μF, ±20%, 50V
CS677	24668221	EL, 220μF, ±20%, 35V
CT01	24590104	PF, 0.1μF
CT02	24353100	CD, 10pF, ±0.25pF
CT03	24353150	CD, 15pF
CT04	24212102	CD, 1000pF, ±10%
CT05	24590104	PF, 0.1μF
CT06	24590104	PF, 0.1μF
CT07	24085944	EL, 2.2μF, ±20%, 50V, Non-Polar
CT08	24232103	CD, 0.01μF, +80%, −20%
CT09	24794101	EL, 100μF, ±20%, 16V
CT10	24436220	CD, 22pF
CT11	24794101	EL, 100μF, ±20%, 16V
CT12	24590104	PF, 0.1μF
CT13	24794100	EL, 10μF, ±20%, 16V
CT14	24794100	EL, 10μF, ±20%, 16V
CT15	24436101	CD, 100pF
CT16	24436220	CD, 22pF
CT17	24232103	CD, 0.01μF, +80%, −20%
CV01	24232103	CD, 0.01μF, +80%, −20%
CV02	24203100	EL, 10μF, ±20%, 16V
CV03	24203100	EL, 10μF, ±20%, 16V
CV04	24203100	EL, 10μF, ±20%, 16V

Location No.	Part No.	Description
CV05	24232103	CD, 0.01μF, +80%, −20%
CV06	24203100	EL, 10μF, ±20%, 16V
CV07	24763471	EL, 470μF, ±20%, 16V
CV08	24763471	EL, 470μF, ±20%, 16V
CV09	24203100	EL, 10μF, ±20%, 16V
CV10	24203100	EL, 10μF, ±20%, 16V
CV12	24232103	CD, 0.01μF, +80%, −20%
CV27	24763471	EL, 470μF, ±20%, 16V
CV29	24763101	EL, 100μF, ±20%, 16V
CV30	24232103	CD, 0.01μF, +80%, −20%
CV31	24212102	CD, 1000pF, ±10%
CV40	24763101	EL, 100μF, ±20%, 16V
CV41	24232103	CD, 0.01μF, +80%, −20%
CV42	24085929	EL, 33μF, ±20%, 16V
CV43	24436820	CD, 82pF
CV43A	24436090	CD, 9pF, ±0.25pF
CV44	24436101	CD, 100pF
CV46	24232103	CD, 0.01μF, +80%, −20%
CV46	24763101	EL, 100μF, ±20%, 16V
CV47	24232103	CD, 0.01μF, +80%, −20%
CV48	24476103	CD, 0.01μF, ±30%, 16V
CV53	24474102	CD, 1000pF, ±10%
CV54	24436330	CD, 33pF
CV70	24436330	CD, 33pF
CV140	24206010	EL, 1μF, 50V
CV502	24203100	EL, 10μF, ±20%, 16V
CV503	24203100	EL, 10μF, ±20%, 16V
CV504	24203100	EL, 10μF, ±20%, 16V
CV506	24763471	EL, 470μF, ±20%, 16V
CV507	24203100	EL, 10μF, ±20%, 16V
CW04	24591822	PF, 8200pF
CW05	24212103	CD, 0.01μF, ±10%
CW07	24666470	EL, 47μF, ±20%, 16V
CW12	24666470	EL, 47μF, ±20%, 16V
CW13	24790100	EL, 10μF, ±20%, 160V
CW14	24436101	CD, 100pF
CW15	24214472	CD, 4700pF, ±10%, 500V
CW16	24436101	CD, 100pF
CW17	24214472	CD, 4700pF, ±10%, 500V
CW18	24666470	EL, 47μF, ±20%, 16V
CW19	24435560	CD, 56pF, 500V
CW20	24790100	EL, 10μF, ±20%, 160V
CW21	24794470	EL, 47μF, ±20%, 16V
CW26	24212102	CD, 1000pF, ±10%
CY01	24763221	EL, 220μF, ±20%, 16V
CY02	24567104	PF, 0.1μF
CY03	24436220	CD, 22pF
CY601	24794101	EL, 100μF, ±20%, 16V
CY602	24797479	EL, 4.7μF, ±20%, 50V
CY603	24797479	EL, 4.7μF, ±20%, 50V
CY604	24794100	EL, 10μF, ±20%, 16V
CY605	24794100	EL, 10μF, ±20%, 16V
CY606	24794100	EL, 10μF, ±20%, 16V
CY607	24797229	EL, 2.2μF, ±20%, 50V
CY608	24794101	EL, 100μF, ±20%, 16V
CY609	24797229	EL, 2.2μF, ±20%, 50V
CZ07	24206229	EL, 2.2μF, 50V
CZ08	24203100	EL, 10μF, ±20%, 16V
CZ09	24436220	CD, 22pF
CZ10	24473180	CD, 18pF
CZ11	24473100	CD, 10pF
CZ12	24232103	CD, 0.01μF, +80%, −20%
CZ13	24092398	CD, 0.1μF, +80%, −20%
CZ14	24617816	EL, 10μF, ±20%, 50V

Location No.	Part No.	Description
CZ15	24232103	CD, 0.01μF, +80%, −20%
CZ16	24206478	EL, 0.47μF, 50V
CZ17	24232103	CD, 0.01μF, +80%, −20%
CZ19	24436181	CD, 180pF
CZ20	24567103	PF, 0.01μF
CZ21	24436390	CD, 39pF
CZ22	24617816	EL, 10μF, ±20%, 50V
CZ23	24092398	CD, 0.1μF, +80%, −20%
CZ24	24092398	CD, 0.1μF, +80%, −20%
CZ25	24203101	EL, 100μF, ±20%, 16V
CZ26	24232103	CD, 0.01μF, +80%, −20%
CZ28	24232103	CD, 0.01μF, +80%, −20%
CZ29	24092398	CD, 0.1μF, +80%, −20%
CZ30	24617816	EL, 10μF, ±20%, 50V
CZ32	24436120	CD, 12pF
CZ33	24436120	CD, 12pF
CZ34	24473120	CD, 12pF
CZ35	24473120	CD, 12pF
CZ36	24232103	CD, 0.01μF, +80%, −20%
CZ37	24092398	CD, 0.1μF, +80%, −20%
CZ38	24092398	CD, 0.1μF, +80%, −20%
CZ43	24232103	CD, 0.01μF, +80%, −20%
CZ45	24436180	CD, 18pF

RESISTORS

R101	24382153	OMF, 15k ohm, 1W
R201	24366821	CF, 820 ohm
R202	24366102	CF, 1k ohm
R204	24366104	CF, 100k ohm
R205	24366101	CF, 100 ohm
R206	24366102	CF, 1k ohm
R207	24366101	CF, 100 ohm
R208	24366101	CF, 100 ohm
R209	24366101	CF, 100 ohm
R212	24366472	CF, 4700 ohm
R213	24366122	CF, 1200 ohm
R214	24366222	CF, 2200 ohm
R215	24366272	CF, 2700 ohm
R216	24366103	CF, 10k ohm
R217	24366102	CF, 1k ohm
R218	24366103	CF, 10k ohm
R220	24366272	CF, 2700 ohm
R221	24366102	CF, 1k ohm
R223	24366102	CF, 1k ohm
R227	24366912	CF, 9100 ohm
R230	24366562	CF, 5600 ohm
R260	24366153	CF, 15k ohm
R261	24366682	CF, 6800 ohm
R266	24366102	CF, 1k ohm
R267	24366102	CF, 1k ohm
R268	24366681	CF, 680 ohm
R269	24366102	CF, 1k ohm
R270	24366682	CF, 6800 ohm
R301	24366102	CF, 1k ohm
R303	24321129	MF, 1.2 ohm, 1/2W
R304	24366223	CF, 22k ohm
R305	24322828	OMF, 0.82 ohm, 1W
R306	24366563	CF, 56k ohm
R307	24366224	CF, 220k ohm
R308	24382391	OMF, 390 ohm, 1W
R310	24366102	CF, 1k ohm
R311	24366562	CF, 5600 ohm
R312	24366153	CF, 15k ohm
R313	24366153	CF, 15k ohm

Location No.	Part No.	Description
R314	24366105	CF, 1M ohm
R315	24366824	CF, 820k ohm
R316	24366274	CF, 270k ohm
R317	24366104	CF, 100k ohm
R318	24366471	CF, 470 ohm
R319	24366471	CF, 470 ohm
R320	24366101	CF, 100 ohm
R327	24000187	FR, 3.3 ohm, 1W
R329	24366153	CF, 15k ohm
R330	24366102	CF, 1k ohm
R334	24366102	CF, 1k ohm
R336	24383221	OMF, 220 ohm, 2W
R341	24366472	CF, 4700 ohm
R343	24366153	CF, 15k ohm
R345	24366102	CF, 1k ohm
R346	24366754	CF, 750k ohm
R347	24366184	CF, 180k ohm
R350	24366222	CF, 2200 ohm
R351	24366823	CF, 82k ohm
R352	24366104	CF, 100k ohm
R353	24382101	OMF, 100 ohm, 1W
R354	24366562	CF, 5600 ohm
R356	24366823	CF, 82k ohm
R357	24366302	CF, 3k ohm
R359	24366472	CF, 4700 ohm
R360	24366102	CF, 1k ohm
R361	24366113	CF, 11k ohm
R362	24366682	CF, 6800 ohm
R363	24366103	CF, 10k ohm
R364	24366103	CF, 10k ohm
R365	24366103	CF, 10k ohm
R366	24366103	CF, 10k ohm
R367	24366752	CF, 7500 ohm
R368	24366123	CF, 12k ohm
R369	24366682	CF, 6800 ohm
R370	24321159	MF, 1.5 ohm, 1/2W
R371	24366562	CF, 5600 ohm
R372	24366392	CF, 3900 ohm
R373	24366182	CF, 1800 ohm
R374	24366473	CF, 47k ohm
R375	24366102	CF, 1k ohm
R380	24366562	CF, 5600 ohm
R381	24366222	CF, 2200 ohm
R382	24377224	CF, 220k ohm, 1W
R389	24366222	CF, 2200 ohm
R390	24553391	OMF, 390 ohm, 1W
R391	24553391	OMF, 390 ohm, 1W
R392	24553391	OMF, 390 ohm, 1W
R396	24366682	CF, 6800 ohm
R397	24366153	CF, 15k ohm
R398	24366822	CF, 8200 ohm
R400	24942102	CC, 1000pF, 1/2W
R401	24366391	CF, 390 ohm
R402	24366103	CF, 10k ohm
R403	24366302	CF, 3k ohm
R405	24382562	OMF, 5600 ohm, 1W
R407	24366103	CF, 10k ohm
R408	24366223	CF, 22k ohm
R409	24553103	OMF, 10k ohm, 1W
R410	24366331	CF, 330 ohm
R411	24366471	CF, 470 ohm
R413	24366274	CF, 270k ohm
R414	24383270	OMF, 27 ohm, 2W
R415	24553272	OMF, 2700 ohm, 1W

Location No.	Part No.	Description
R416	24510622	Cement, 6200 ohm, 5W
R424	24546338	FR, 0.33 ohm, 1/2W
R425	24552331	OMF, 330 ohm, 1/2W
R426	24366821	CF, 820 ohm
R427	24366392	CF, 3900 ohm
R428	24366561	CF, 560 ohm
R429	24552560	OMF, 56 ohm, 1/2W
R431	24382100	OMF, 10 ohm, 1W
R432	24532560	FR, 56 ohm, 1W
R434	24366102	CF, 1k ohm
R435	24366333	CF, 33k ohm
R436	24327224	MF, 220k ohm, ±1%, 1/4W
R437	24321209	MF, 2 ohm, 1/2W
R439	24366472	CF, 4700 ohm
R441	24383102	OMF, 1k ohm, 2W
R442	24366472	CF, 4700 ohm
R442	24382513	OMF, 51k ohm, 1W
R443	24366472	CF, 4700 ohm
R443	24310109	MF, 1.0 ohm, 1/2W
R444	24338398	MF, 0.39 ohm, 1W
R445	24553682	OMF, 6800 ohm, 1W
R446	24553682	OMF, 6800 ohm, 1W
R447	24382473	OMF, 47k ohm, 1W
R448	24338828	MF, 0.82 ohm, 1W
R450	24066879	VR, 1k ohm, 0.3W
R451	24376223	CF, 22k ohm, 1/2W
R452	24376223	CF, 22k ohm, 1/2W
R453	24376223	CF, 22k ohm, 1/2W
R454	24366223	CF, 22k ohm
R455	24366333	CF, 33k ohm
R458	24366823	CF, 82k ohm
R459	24367273	CF, 27k ohm, ±2%
R460	24381332	OMF, 3300 ohm, 1/2W
R461	24552332	OMF, 3300 ohm, 1/2W
R462	24367103	CF, 10k ohm, ±2%
R463	24339109	MF, 1 ohm, 2W
R464	24366273	CF, 27k ohm
R465	24366114	CF, 110k ohm
R466	24366152	CF, 1500 ohm
R467	24366102	CF, 1k ohm
R468	24366333	CF, 33k ohm
R469	24000465	FR, 9.1 ohm, 1W
R472	24552270	OMF, 27 ohm, 1/2W
R477	24383121	OMF, 120 ohm, 2W
R478	24376333	CF, 33k ohm, 1/2W
R480	24382272	OMF, 2700 ohm, 1W
R481	24366393	CF, 39k ohm
R482	24366103	CF, 10k ohm
R483	24366154	CF, 150k ohm
R484	24366473	CF, 47k ohm
R485	24381221	OMF, 220 ohm, 1/2W
R487	24366472	CF, 4700 ohm
R488	24366474	CF, 470k ohm
R489	24366332	CF, 3300 ohm
R490	24366332	CF, 3300 ohm
R491	24366912	CF, 9100 ohm
R492	24366102	CF, 1k ohm
R493	24366682	CF, 6800 ohm
R494	24366183	CF, 18k ohm
R497	24381221	OMF, 220 ohm, 1/2W
R501	24366223	CF, 22k ohm
R502	24366101	CF, 100 ohm
R503	24366101	CF, 100 ohm
R504	24366101	CF, 100 ohm

Location No.	Part No.	Description
R505	24366102	CF, 1k ohm
R506	24366103	CF, 10k ohm
R508	24366102	CF, 1k ohm
R509	24366102	CF, 1k ohm
R510	24366102	CF, 1k ohm
R511	24366101	CF, 100 ohm
R512	24366101	CF, 100 ohm
R514	24366101	CF, 100 ohm
R515	24366102	CF, 1k ohm
R516	24366101	CF, 100 ohm
R517	24366102	CF, 1k ohm
R518	24366101	CF, 100 ohm
R519	24366102	CF, 1k ohm
R520	24366103	CF, 10k ohm
R521	24366223	CF, 22k ohm
R522	24366473	CF, 47k ohm
R523	24366101	CF, 100 ohm
R524	24366101	CF, 100 ohm
R525	24366102	CF, 1k ohm
R526	24366102	CF, 1k ohm
R527	24366102	CF, 1k ohm
R528	24366223	CF, 22k ohm
R529	24366103	CF, 10k ohm
R530	24366101	CF, 100 ohm
R531	24366103	CF, 10k ohm
R532	24366101	CF, 100 ohm
R533	24366103	CF, 10k ohm
R534	24366101	CF, 100 ohm
R535	24366102	CF, 1k ohm
R536	24366102	CF, 1k ohm
R537	24366101	CF, 100 ohm
R538	24366103	CF, 10k ohm
R539	24366223	CF, 22k ohm
R540	24366101	CF, 100 ohm
R541	24366153	CF, 15k ohm
R542	24366472	CF, 4700 ohm
R601	24366562	CF, 5600 ohm
R602	24366562	CF, 5600 ohm
R603	24366222	CF, 2200 ohm
R604	24366222	CF, 2200 ohm
R607	24366100	CF, 10 ohm
R608	24366100	CF, 10 ohm
R609	24366229	CF, 2.2 ohm
R610	24366229	CF, 2.2 ohm
R611	24366223	CF, 22k ohm
R612	24366223	CF, 22k ohm
R680	24366473	CF, 47k ohm
R681	24366103	CF, 10k ohm
R683	24366223	CF, 22k ohm
R684	24366223	CF, 22k ohm
R687	24366103	CF, 10k ohm
R688	24366333	CF, 33k ohm
R688	24552391	OMF, 390 ohm, 1/2W
R690	24552391	OMF, 390 ohm, 1/2W
R730	24366104	CF, 100k ohm
R731	24366103	CF, 10k ohm
R732	24366473	CF, 47k ohm
R733	24366473	CF, 47k ohm
R792	24366473	CF, 47k ohm
R793	24366473	CF, 47k ohm
R795	24366472	CF, 4700 ohm
R796	24366682	CF, 6800 ohm
⚠ R801	24009954	Metal-Glazed Resistor, 2.2M ohm, 1/2W

Location No.	Part No.	Description
⚠ R802	24009954	Metal-Glazed Resistor, 2.2M ohm, 1/2W
R803	24555223	OMF, 22k ohm, 3W
R804	24545109	FR, 1 ohm, 1/4W
R805	24366101	CF, 100 ohm
R806	24007061	Cement, 1.8 ohm, ±10%, 2W
R807	24510479	Cement, 4.7 ohm, 5W
R808	24366472	CF, 4700 ohm
R809	24366102	CF, 1k ohm
R811	24366820	CF, 82 ohm
R812	24381153	OMF, 15k ohm, 1/2W
R813	24366182	CF, 1800 ohm
R814	24366122	CF, 1200 ohm
R815	24552561	OMF, 560 ohm, 1/2W
R816	24322689	OMF, 6.8 ohm, 1W
R817	24366471	CF, 470 ohm
R818	24322278	MF, 0.27 ohm, 1W
R819	24321568	MF, 0.56 ohm, 1/2W
R821	24366101	CF, 100 ohm
R822	24321568	MF, 0.56 ohm, 1/2W
R825	24366153	CF, 15k ohm
R827	24366102	CF, 1k ohm
R828	24366562	CF, 5600 ohm
R829	24322278	MF, 0.27 ohm, 1W
R830	24569181	Cement, 180 ohm, 10W
R831	24554152	OMF, 1500 ohm, 2W
R832	24383152	OMF, 1500 ohm, 2W
R833	24366103	CF, 10k ohm
R836	24554331	OMF, 330 ohm, 2W
R836	24366101	CF, 100 ohm
R837	24545109	FR, 1 ohm, 1/4W
R837	24327680	MF, 68 ohm, ±1%, 1/4W
R838	24366103	CF, 10k ohm
R839	24366222	CF, 2200 ohm
R840	24366681	CF, 680 ohm
R842	24381391	OMF, 390 ohm, 1/2W
R843	24552561	OMF, 560 ohm, 1/2W
R844	24366223	CF, 22k ohm
R844	24366471	CF, 470 ohm
R845	24338568	MF, 0.56 ohm, 1W
R846	24381301	OMF, 300 ohm, 1/2W
R847	24366103	CF, 10k ohm
R847	24381750	OMF, 75 ohm, 1/2W
R848	24366472	CF, 4700 ohm
R849	24366471	CF, 470 ohm
R851	24545109	FR, 1 ohm, 1/4W
R861	24569229	Cement, 2.2 ohm, 10W
R862	24555223	OMF, 22k ohm, 3W
R864	24366101	CF, 100 ohm
R865	24339518	MF, 0.51 ohm, 2W
R866	24552561	OMF, 560 ohm, 1/2W
R867	24321688	MF, 0.68 ohm, 1/2W
R868	24552103	OMF, 10k ohm, 1/2W
R869	24366272	CF, 2700 ohm
R870	24366122	CF, 1200 ohm
R871	24366272	CF, 2700 ohm
R872	24366392	CF, 3900 ohm
R875	24366103	CF, 10k ohm
R879	24366102	CF, 1k ohm
R882	24366472	CF, 4700 ohm
R883	24366472	CF, 4700 ohm
R884	24366472	CF, 4700 ohm
R885	24366472	CF, 4700 ohm
R886	24366472	CF, 4700 ohm

Location No.	Part No.	Description
R887	24552162	OMF, 1600 ohm, 1/2W
R888	24366471	CF, 470 ohm
R890	24382333	OMF, 33k ohm, 1W
R891	24552820	OMF, 82 ohm, 1/2W
R892	24552391	OMF, 390 ohm, 1/2W
R893	24552561	OMF, 560 ohm, 1/2W
R894	24366562	CF, 5600 ohm
R895	24531120	FR, 12 ohm, 1/2W
R896	24366102	CF, 1k ohm
R897	24366101	CF, 100 ohm
R898	24366681	CF, 680 ohm
⚠ R899	24005007	Metal-Glazed Resistor, 8.2M ohm, 1W
R899A	23160994	Terminal, L=24
R901	24366101	CF, 100 ohm
R903	24942102	CC, 1000pF, 1/2W
R904	24366102	CF, 1k ohm
R905	24366910	CF, 91 ohm
R906	24366471	CF, 470 ohm
R908	24366430	CF, 43 ohm
R909	24366121	CF, 120 ohm
R911	24366101	CF, 100 ohm
R913	24942102	CC, 1000pF, 1/2W
R914	24366102	CF, 1k ohm
R915	24366820	CF, 82 ohm
R916	24366471	CF, 470 ohm
R918	24366430	CF, 43 ohm
R921	24366101	CF, 100 ohm
R923	24942102	CC, 1000pF, 1/2W
R924	24366102	CF, 1k ohm
R925	24366121	CF, 120 ohm
R926	24366471	CF, 470 ohm
R928	24366430	CF, 43 ohm
R931	24555153	OMF, 15k ohm, 3W
R932	24555153	OMF, 15k ohm, 3W
R933	24000929	FR, 1.5 ohm, 2W
R936	24366330	CF, 33 ohm
R938	24366471	CF, 470 ohm
R940	24366331	CF, 330 ohm
R941	24555153	OMF, 15k ohm, 3W
R942	24555153	OMF, 15k ohm, 3W
R943	24366103	CF, 10k ohm
R944	24366120	CF, 12 ohm
R945	24366560	CF, 56 ohm
R946	24366330	CF, 33 ohm
R947	24366561	CF, 560 ohm
R948	24366101	CF, 100 ohm
R949	24366910	CF, 91 ohm
R951	24555153	OMF, 15k ohm, 3W
R952	24555153	OMF, 15k ohm, 3W
R953	24366910	CF, 91 ohm
R956	24366271	CF, 270 ohm
R957	24366330	CF, 33 ohm
R961	24366821	CF, 820 ohm
R962	24366391	CF, 390 ohm
R963	24366222	CF, 2200 ohm
R964	24366332	CF, 3300 ohm
R965	24366471	CF, 470 ohm
R966	24366821	CF, 820 ohm
R967	24366122	CF, 1200 ohm
R968	24366680	CF, 68 ohm
R969	24366103	CF, 10k ohm
R970	24366222	CF, 2200 ohm
R971	24367152	CF, 1500 ohm, ±2%

Location No.	Part No.	Description
R972	24367471	CF, 470 ohm, ±2%
R973	24367681	CF, 680 ohm, ±2%
R974	24367681	CF, 680 ohm, ±2%
R975	24366242	CF, 2400 ohm
R976	24367562	CF, 5600 ohm, ±2%
R977	24367682	CF, 560 ohm, ±2%
R978	24367681	CF, 680 ohm, ±2%
R993	24366222	CF, 2200 ohm
R994	24366272	CF, 2700 ohm
R995	24366102	CF, 1k ohm
R996	24366103	CF, 10k ohm
R997	24366272	CF, 2700 ohm
R998	24366102	CF, 1k ohm
R999	24366102	CF, 1k ohm
R7707	24366472	CF, 4700 ohm
R7708	24366472	CF, 4700 ohm
R7710	24555680	OMF, 68 ohm, 3W
R7711	24323229	MF, 2.2 ohm, 2W
R7712	24366472	CF, 4700 ohm
R7713	24366472	CF, 4700 ohm
R7715	24555680	OMF, 68 ohm, 3W
R7716	24323229	MF, 2.2 ohm, 2W
R7717	24366472	CF, 4700 ohm
R7718	24366472	CF, 4700 ohm
R7720	24555680	OMF, 68 ohm, 3W
R7721	24323229	MF, 2.2 ohm, 2W
R7722	24366472	CF, 4700 ohm
R7723	24366472	CF, 4700 ohm
R7725	24555680	OMF, 68 ohm, 3W
R7726	24323229	MF, 2.2 ohm, 2W
R7727	24366472	CF, 4700 ohm
R7728	24366472	CF, 4700 ohm
R7730	24555680	OMF, 68 ohm, 3W
R7731	24323229	MF, 2.2 ohm, 2W
R7732	24366472	CF, 4700 ohm
R7733	24366472	CF, 4700 ohm
R7735	24555680	OMF, 68 ohm, 3W
R7736	24323229	MF, 2.2 ohm, 2W
R7738	24383101	OMF, 100 ohm, 2W
R7741	24366102	CF, 1k ohm
R7742	24366102	CF, 1k ohm
R7743	24366223	CF, 22k ohm
R7744	24366102	CF, 1k ohm
R7745	24366152	CF, 1500 ohm
R7746	24366223	CF, 22k ohm
R7747	24366222	CF, 2200 ohm
R7749	24366331	CF, 330 ohm
R7750	24323278	MF, 0.27 ohm, 2W
R7751	24366471	CF, 470 ohm
R7757	24366223	CF, 22k ohm
R7758	24366222	CF, 2200 ohm
R7763	24366471	CF, 470 ohm
R7764	24366331	CF, 330 ohm
R7765	24339398	MF, 0.39 ohm, 2W
R7766	24366223	CF, 22k ohm
R7767	24366223	CF, 22k ohm
R7768	24366102	CF, 1k ohm
R7770	24366222	CF, 2200 ohm
R7771	24366102	CF, 1k ohm
R7772	24366102	CF, 1k ohm
R7775	24366273	CF, 27k ohm
R7776	24366472	CF, 4700 ohm
R7777	24366273	CF, 27k ohm
R7778	24366472	CF, 4700 ohm

Location No.	Part No.	Description
R7779	24366102	CF, 1k ohm
R7780	24366102	CF, 1k ohm
R7781	24366333	CF, 33k ohm
R7782	24339828	OMF, 0.82 ohm, 2W
R7783	24366331	CF, 330 ohm
R7784	24366471	CF, 470 ohm
R7785	24366222	CF, 2200 ohm
R7786	24366103	CF, 10k ohm
R7787	24366104	CF, 100k ohm
R7788	24366103	CF, 10k ohm
R7789	24366471	CF, 470 ohm
R7790	24552182	OMF, 1800 ohm, 1/2W
R7791	24552681	OMF, 680 ohm, 1/2W
R7792	24366471	CF, 470 ohm
R7801	24366472	CF, 4700 ohm
R7802	24366103	CF, 10k ohm
R7803	24366103	CF, 10k ohm
R7804	24366101	CF, 100 ohm
R7805	24366101	CF, 100 ohm
R7806	24366101	CF, 100 ohm
R7807	24366102	CF, 1k ohm
R7808	24366104	CF, 100k ohm
R8701	24554391	OMF, 390 ohm, 2W
R9098	24366103	CF, 10k ohm
R9099	24366472	CF, 4700 ohm
R9601	24366821	CF, 820 ohm
R9602	24366562	CF, 5600 ohm
R9603	24366392	CF, 3900 ohm
R9604	24366272	CF, 2700 ohm
R9605	24366103	CF, 10k ohm
R9606	24366392	CF, 3900 ohm
R9613	24366560	CF, 56 ohm
R9614	24366560	CF, 56 ohm
R9615	24366101	CF, 100 ohm
R9616	24366102	CF, 1k ohm
R9617	24366151	CF, 150 ohm
R9702	24366102	CF, 1k ohm
R9703	24366822	CF, 8200 ohm
R9704	24366103	CF, 10k ohm
R9705	24366103	CF, 10k ohm
R9706	24366271	CF, 270 ohm
R9707	24366271	CF, 270 ohm
R9708	24366272	CF, 2700 ohm
RA01	24366470	CF, 47 ohm
RA02	24366272	CF, 2700 ohm
RA03	24366102	CF, 1k ohm
RA04	24366102	CF, 1k ohm
RA05	24366102	CF, 1k ohm
RA06	24366102	CF, 1k ohm
RA07	24366102	CF, 1k ohm
RA08	24366102	CF, 1k ohm
RA09	24366102	CF, 1k ohm
RA10	24366103	CF, 10k ohm
RA13	24366682	CF, 6800 ohm
RA15	24366102	CF, 1k ohm
RA16	24366102	CF, 1k ohm
RA17	24366102	CF, 1k ohm
RA18	24366102	CF, 1k ohm
RA22	24366331	CF, 330 ohm
RA23	24366331	CF, 330 ohm
RA24	24366331	CF, 330 ohm
RA25	24366101	CF, 100 ohm
RA26	24366102	CF, 1k ohm
RA27	24366102	CF, 1k ohm

Location No.	Part No.	Description
RA32	24366223	CF, 22k ohm
RA33	24366103	CF, 10k ohm
RA34	24366102	CF, 1k ohm
RA35	24366102	CF, 1k ohm
RA36	24366472	CF, 4700 ohm
RA37	24366101	CF, 100 ohm
RA38	24366101	CF, 100 ohm
RA40	24366331	CF, 330 ohm
RA41	24366331	CF, 330 ohm
RA61	24366103	CF, 10k ohm
RA62	24366103	CF, 10k ohm
RA67	24366273	CF, 27k ohm
RA68	24366273	CF, 27k ohm
RA70	24366333	CF, 33k ohm
RA71	24366683	CF, 68k ohm
RA72	24366223	CF, 22k ohm
RA73	24366103	CF, 10k ohm
RA75	24366333	CF, 33k ohm
RA76	24366103	CF, 10k ohm
RA76	24366102	CF, 1k ohm
RA77	24366223	CF, 22k ohm
RA79	24366332	CF, 3300 ohm
RA80	24366332	CF, 3300 ohm
RA86	24366101	CF, 100 ohm
RA87	24366101	CF, 100 ohm
RA061	24366103	CF, 10k ohm
RA071	24366103	CF, 10k ohm
RA151	24366333	CF, 33k ohm
RB01	24366271	CF, 270 ohm
RB02	24366221	CF, 220 ohm
RB03	24366101	CF, 100 ohm
RB04	24366223	CF, 22k ohm
RB05	24366471	CF, 470 ohm
RB09	24366470	CF, 47 ohm
RB11	24366103	CF, 10k ohm
RB40	24366103	CF, 10k ohm
RB41	24366821	CF, 820 ohm
RB42	24366153	CF, 15k ohm
RB43	24366103	CF, 10k ohm
RB44	24366103	CF, 10k ohm
RB45	24366101	CF, 100 ohm
RB46	24366122	CF, 1200 ohm
RB47	24366123	CF, 12k ohm
RB48	24366123	CF, 12k ohm
RB49	24366562	CF, 5600 ohm
RB50	24366392	CF, 3900 ohm
RB51	24366473	CF, 47k ohm
RB52	24366271	CF, 270 ohm
RB53	24366271	CF, 270 ohm
RB54	24366222	CF, 2200 ohm
RB55	24366222	CF, 2200 ohm
RB56	24366102	CF, 1k ohm
RB65	24366473	CF, 47k ohm
RB67	24366473	CF, 47k ohm
RB68	24366103	CF, 10k ohm
RB69	24366682	CF, 6800 ohm
RB81	24366122	CF, 1200 ohm
RB82	24366123	CF, 12k ohm
RB83	24366123	CF, 12k ohm
RB84	24366562	CF, 5600 ohm
RB90	24366392	CF, 3900 ohm
RB91	24366473	CF, 47k ohm
RB92	24366271	CF, 270 ohm
RB93	24366271	CF, 270 ohm

Location No.	Part No.	Description
RB94	24366222	CF, 2200 ohm
RB95	24366222	CF, 2200 ohm
RB98	24366102	CF, 1k ohm
RC27	24366102	CF, 1k ohm
RD80	24366822	CF, 8200 ohm
RD82	24366472	CF, 4700 ohm
RD83	24366102	CF, 1k ohm
RG01	24366333	CF, 33k ohm
RG02	24366333	CF, 33k ohm
RG03	24366101	CF, 100 ohm
RG04	24366101	CF, 100 ohm
RG05	24366101	CF, 100 ohm
RG06	24366101	CF, 100 ohm
RG09	24366472	CF, 4700 ohm
RG10	24366822	CF, 8200 ohm
RG11	24366472	CF, 4700 ohm
RG12	24366822	CF, 8200 ohm
RG20	24366103	CF, 10k ohm
RG21	24366103	CF, 10k ohm
RQ01	24366102	CF, 1k ohm
RQ02	24366475	CF, 4.7M ohm
RQ03	24366102	CF, 1k ohm
RQ04	24366511	CF, 510 ohm
RQ05	24366471	CF, 470 ohm
RQ06	24366471	CF, 470 ohm
RQ07	24366103	CF, 10k ohm
RQ08	24366102	CF, 1k ohm
RQ09	24366102	CF, 1k ohm
RQ10	24366102	CF, 1k ohm
RQ11	24366561	CF, 560 ohm
RQ12	24366561	CF, 560 ohm
RQ13	24366203	CF, 20k ohm
RQ14	24366273	CF, 27k ohm
RQ20	24366563	CF, 56k ohm
RR01	24366472	CF, 4700 ohm
RR02	24366472	CF, 4700 ohm
RR03	24366472	CF, 4700 ohm
RR12	24366223	CF, 22k ohm
RR17	24366102	CF, 1k ohm
RR18	24366102	CF, 1k ohm
RR21	24366103	CF, 10k ohm
RR22	24366222	CF, 2200 ohm
RR23	24366101	CF, 100 ohm
RR24	24366101	CF, 100 ohm
RR25	24366101	CF, 100 ohm
RR26	24366101	CF, 100 ohm
RR27	24366473	CF, 47k ohm
RR28	24366473	CF, 47k ohm
RR29	24366473	CF, 47k ohm
RR30	24366472	CF, 4700 ohm
RR31	24366560	CF, 56 ohm
RR33	24366821	CF, 820 ohm
RR34	24366821	CF, 820 ohm
RR35	24366821	CF, 820 ohm
RR36	24366392	CF, 3900 ohm
RR37	24366392	CF, 3900 ohm
RR38	24366392	CF, 3900 ohm
RR39	24366222	CF, 2200 ohm
RR40	24366223	CF, 22k ohm
RR41	24366103	CF, 10k ohm
RR50	24366222	CF, 2200 ohm
RR51	24366272	CF, 2700 ohm
RR95	24366331	CF, 330 ohm
RR96	24366331	CF, 330 ohm

Location No.	Part No.	Description
RR97	24366331	CF, 330 ohm
RR98	24366331	CF, 330 ohm
RR99	24366102	CF, 1k ohm
RR100	24366102	CF, 1k ohm
RR101	24366102	CF, 1k ohm
RR102	24366102	CF, 1k ohm
RS01	24366102	CF, 1k ohm
RS02	24366102	CF, 1k ohm
RS03	24366101	CF, 100 ohm
RS04	24366101	CF, 100 ohm
RS05	24366102	CF, 1k ohm
RS07	24366472	CF, 4700 ohm
RS08	24366472	CF, 4700 ohm
RS09	24366472	CF, 4700 ohm
RS10	24366472	CF, 4700 ohm
RS11	24366472	CF, 4700 ohm
RS12	24366472	CF, 4700 ohm
RS13	24366101	CF, 100 ohm
RS14	24366101	CF, 100 ohm
RS25	24366103	CF, 10k ohm
RS26	24366103	CF, 10k ohm
RS27	24366561	CF, 560 ohm
RS28	24366561	CF, 560 ohm
RS29	24366103	CF, 10k ohm
RS30	24366103	CF, 10k ohm
RS31	24366102	CF, 1k ohm
RS32	24366103	CF, 10k ohm
RS33	24366101	CF, 100 ohm
RS34	24366102	CF, 1k ohm
RS35	24366101	CF, 100 ohm
RS36	24366102	CF, 1k ohm
RS45	24366393	CF, 39k ohm
RS46	24366393	CF, 39k ohm
RS601	24366101	CF, 100 ohm
RS602	24366101	CF, 100 ohm
RS603	24366102	CF, 1k ohm
RS604	24366102	CF, 1k ohm
RS605	24366561	CF, 560 ohm
RS606	24366561	CF, 560 ohm
RS607	24366104	CF, 100k ohm
RS608	24366104	CF, 100k ohm
RS609	24366103	CF, 10k ohm
RS610	24366103	CF, 10k ohm
RS611	24366103	CF, 10k ohm
RS612	24366104	CF, 100k ohm
RS664	24366223	CF, 22k ohm
RS665	24366681	CF, 680 ohm
RS666	24366104	CF, 100k ohm
RS667	24366102	CF, 1k ohm
RS668	24366104	CF, 100k ohm
RS669	24366104	CF, 100k ohm
RS670	24552152	OMF, 1500 ohm, 1/2W
RS671	24366103	CF, 10k ohm
RS672	24366103	CF, 10k ohm
RS673	24366563	CF, 56k ohm
RS674	24366563	CF, 56k ohm
RS675	24366153	CF, 15k ohm
RS676	24366103	CF, 10k ohm
RS678	24366103	CF, 10k ohm
RS679	24366103	CF, 10k ohm
RS681	24366102	CF, 1k ohm
RT01	24366332	CF, 3300 ohm
RT02	24366100	CF, 10 ohm
RT03	24366101	CF, 100 ohm

Location No.	Part No.	Description
RT04	24366273	CF, 27k ohm
RT05	24366103	CF, 10k ohm
RT06	24366103	CF, 10k ohm
RT07	24366102	CF, 1k ohm
RT08	24366103	CF, 10k ohm
RT09	24366101	CF, 100 ohm
RT10	24366472	CF, 4700 ohm
RT11	24366392	CF, 3900 ohm
RT12	24366682	CF, 6800 ohm
RT13	24366103	CF, 10k ohm
RT14	24366222	CF, 2200 ohm
RT15	24366101	CF, 100 ohm
RT16	24366101	CF, 100 ohm
RT17	24366102	CF, 1k ohm
RT18	24366152	CF, 1500 ohm
RT19	24366122	CF, 1200 ohm
RT20	24366471	CF, 470 ohm
RT21	24366561	CF, 560 ohm
RT22	24366271	CF, 270 ohm
RT23	24366821	CF, 820 ohm
RV01	24366101	CF, 100 ohm
RV02	24366101	CF, 100 ohm
RV03	24366101	CF, 100 ohm
RV04	24366101	CF, 100 ohm
RV05	24366101	CF, 100 ohm
RV06	24366101	CF, 100 ohm
RV09	24366101	CF, 100 ohm
RV10	24366101	CF, 100 ohm
RV11	24366101	CF, 100 ohm
RV12	24366101	CF, 100 ohm
RV13	24366101	CF, 100 ohm
RV14	24366101	CF, 100 ohm
RV15	24366101	CF, 100 ohm
RV16	24366101	CF, 100 ohm
RV17	24366101	CF, 100 ohm
RV18	24366101	CF, 100 ohm
RV19	24366101	CF, 100 ohm
RV20	24366332	CF, 3300 ohm
RV35	24366103	CF, 10k ohm
RV37	24366750	CF, 75 ohm
RV40	24366822	CF, 8200 ohm
RV41	24366472	CF, 4700 ohm
RV42	24366471	CF, 470 ohm
RV43	24366471	CF, 470 ohm
RV44	24366821	CF, 820 ohm
RV45	24366151	CF, 150 ohm
RV46	24366102	CF, 1k ohm
RV47	24366102	CF, 1k ohm
RV48	24366102	CF, 1k ohm
RV49	24366102	CF, 1k ohm
RV60	24366682	CF, 6800 ohm
RV61	24366750	CF, 75 ohm
RV63	24366101	CF, 100 ohm
RV65	24366103	CF, 10k ohm
RV67	24366820	CF, 82 ohm
RV68	24366103	CF, 10k ohm
RV70	24366820	CF, 82 ohm
RV75	24366820	CF, 82 ohm
RV76	24366103	CF, 10k ohm
RV77	24366101	CF, 100 ohm
RV78	24366181	CF, 180 ohm
RV80	24366682	CF, 6800 ohm
RV84	24366102	CF, 1k ohm
RV85	24366361	CF, 360 ohm

Location No.	Part No.	Description
RV86	24366361	CF, 360 ohm
RV89	24366750	CF, 75 ohm
RV91	24552101	OMF, 100 ohm, 1/2W
RV95	24366271	CF, 270 ohm
RV100	24366101	CF, 100 ohm
RV101	24366102	CF, 1k ohm
RV102	24366271	CF, 270 ohm
RV103	24366473	CF, 47k ohm
RV104	24366100	CF, 10 ohm
RV105	24366272	CF, 2700 ohm
RV106	24366223	CF, 22k ohm
RV107	24366223	CF, 22k ohm
RV108	24366103	CF, 10k ohm
RV109	24366103	CF, 10k ohm
RV110	24366123	CF, 12k ohm
RV111	24366103	CF, 10k ohm
RV112	24366103	CF, 10k ohm
RV123	24366750	CF, 75 ohm
RV124	24366750	CF, 75 ohm
RV125	24366101	CF, 100 ohm
RV126	24366472	CF, 4700 ohm
RV127	24366101	CF, 100 ohm
RV128	24366101	CF, 100 ohm
RV129	24366103	CF, 10k ohm
RV130	24366102	CF, 1k ohm
RV131	24366221	CF, 220 ohm
RV132	24366223	CF, 22k ohm
RV133	24366223	CF, 22k ohm
RV134	24366100	CF, 10 ohm
RV135	24366473	CF, 47k ohm
RV140	24366102	CF, 1k ohm
RV501	24366333	CF, 33k ohm
RV502	24366223	CF, 22k ohm
RV503	24366333	CF, 33k ohm
RV504	24366223	CF, 22k ohm
RV505	24366102	CF, 1k ohm
RV506	24366101	CF, 100 ohm
RV507	24366102	CF, 1k ohm
RV508	24366102	CF, 1k ohm
RV509	24366102	CF, 1k ohm
RV510	24366101	CF, 100 ohm
RV520	24366333	CF, 33k ohm
RV521	24366223	CF, 22k ohm
RV522	24366102	CF, 1k ohm
RV523	24366101	CF, 100 ohm
RV524	24366471	CF, 470 ohm
RV525	24366471	CF, 470 ohm
RV526	24366682	CF, 6800 ohm
RV527	24366133	CF, 13k ohm
RV528	24366681	CF, 680 ohm
RV531	24366332	CF, 3300 ohm
RV540	24366102	CF, 1k ohm
RW02	24366821	CF, 820 ohm
RW09	24366563	CF, 56k ohm
RW13	24366393	CF, 39k ohm
RW14	24552121	OMF, 120 ohm, 1/2W
RW15	24366223	CF, 22k ohm
RW16	24366273	CF, 27k ohm
RW17	24366333	CF, 33k ohm
RW18	24366101	CF, 100 ohm
RW19	24366100	CF, 10 ohm
RW20	24366392	CF, 3900 ohm
RW22	24366102	CF, 1k ohm
RW23	24366471	CF, 470 ohm

Location No.	Part No.	Description
RW24	24366470	CF, 47 ohm
RW25	24366182	CF, 1800 ohm
RW30	24552100	OMF, 10 ohm, 1/2W
RW31	24552331	OMF, 330 ohm, 1/2W
RW32	24366820	CF, 82 ohm
RW33	24366683	CF, 68k ohm
RW34	24366820	CF, 82 ohm
RW35	24366683	CF, 68k ohm
RW36	24366330	CF, 33 ohm
RW37	24366152	CF, 1500 ohm
RW38	24366102	CF, 1k ohm
RW38	24366102	CF, 1k ohm
RW39	24366152	CF, 1500 ohm
RW40	24366330	CF, 33 ohm
RW41	24366279	CF, 2.7 ohm
RW42	24366279	CF, 2.7 ohm
RW43	24554221	OMF, 220 ohm, 2W
RW44	24366122	CF, 1200 ohm
RW45	24366122	CF, 1200 ohm
RY604	24366123	CF, 12k ohm
RY605	24366682	CF, 6800 ohm
RY606	24366333	CF, 33k ohm
RY607	24366392	CF, 3900 ohm
RY608	24366123	CF, 12k ohm
RY609	24366102	CF, 1k ohm
RY610	24366104	CF, 100k ohm
RY611	24366473	CF, 47k ohm
RY612	24366102	CF, 1k ohm
RY613	24382121	OMF, 120 ohm, 1W
RY614	24366103	CF, 10k ohm
RY615	24366223	CF, 22k ohm
RY616	24366104	CF, 100k ohm
RY617	24366183	CF, 18k ohm
RY632	24366100	CF, 10 ohm
RZ01	24366471	CF, 470 ohm
RZ02	24366152	CF, 1500 ohm
RZ04	24366332	CF, 3300 ohm
RZ05	24366332	CF, 3300 ohm
RZ06	24366821	CF, 820 ohm
RZ07	24366822	CF, 8200 ohm
RZ08	24366332	CF, 3300 ohm
RZ12	24366471	CF, 470 ohm
RZ14	24366123	CF, 12k ohm
RZ15	24366392	CF, 3900 ohm
RZ16	24366122	CF, 1200 ohm
RZ17	24366331	CF, 330 ohm
RZ18	24366821	CF, 820 ohm
RZ19	24366471	CF, 470 ohm
RZ20	24366122	CF, 1200 ohm
RZ22	24366101	CF, 100 ohm
RZ23	24366821	CF, 820 ohm
RZ24	24366821	CF, 820 ohm
RZ25	24366101	CF, 100 ohm
RZ26	24366101	CF, 100 ohm
RZ28	24366564	CF, 560k ohm
RZ29	24366331	CF, 330 ohm
RZ30	24366331	CF, 330 ohm
RZ31	24366102	CF, 1k ohm

COILS & TRANSFORMERS

L101	23289101	Coil, Peaking, TRF4101AF
L102	23289100	Coil, Peaking, TRF4100AF
L103	23289100	Coil, Peaking, TRF4100AF
L104	23237995	Coil, Peaking, TRF4229AC
L111	23237999	Coil, Peaking, TRF4109AC
L112	23237999	Coil, Peaking, TRF4109AC
L115	23103824	Filter, TEM2028K
L116	23237995	Coil, Peaking, TRF4229AC
L117	23237983	Coil, Peaking, TRF4220AC
L220	23103824	Filter, TEM2028K
L221	23103845	Filter, TEM2030AY
L301	23103880	Coil (Ferrite Bead), TEM2011Y
L303	23237975	Coil, Peaking, TRF4101AC
L400	23289100	Coil, Peaking, TRF4100AF
L441	23233977	Coil, Linearity, TLN2203AG
L442	23221974	Coil, Choke, TLN3007
L461	23248115	Coil, Choke, TLN3367D
L462	23231135	Deflection Yoke, TDY707AS(R)
L463	23231135	Deflection Yoke, TDY707AS(R)
L464	23231135	Deflection Yoke, TDY707AS(R)
L465	23103880	Coil (Ferrite Bead), TEM2011Y
L472	23102441	Magnet, MAG1094
L473	23102441	Magnet, MAG1094
L474	23102441	Magnet, MAG1094
L501	23289470	Coil, Peaking, TRF4470AF
L502	23289470	Coil, Peaking, TRF4470AF
L503	23289470	Coil, Peaking, TRF4470AF
L504	23289479	Coil, Peaking, TRF44R7AF
L505	23103845	Filter, TEM2030AY
L801	23221747	Coil, Choke, TRF9253D
L802	23221747	Coil, Choke, TRF9253D
L805	70211045	Coil, Choke, 0.02mH
L806	23248073	Coil, Choke, TLN3299D
L807	23248073	Coil, Choke, TLN3299D
L811	23103859	Coil (Ferrite Bead), TEM2011
L813	23103859	Coil (Ferrite Bead), TEM2011
L814	23221747	Coil, Choke, TRF9253D
L820	23289844	Coil, Peaking, TRF4470AT
L821	23248073	Coil, Choke, TLN3299D
L822	23248073	Coil, Choke, TLN3299D
L823	23280019	Coil, Peaking, TRF4330AZ
L830	23289844	Coil, Peaking, TRF4470AT
L831	23289844	Coil, Peaking, TRF4470AT
L850	23261959	Coil, Choke, TRF9240
L851	23103859	Coil (Ferrite Bead), TEM2011
L852	23261959	Coil, Choke, TRF9240
L853	23103859	Coil (Ferrite Bead), TEM2011
L854	23103859	Coil (Ferrite Bead), TEM2011
L855	23103859	Coil (Ferrite Bead), TEM2011
L856	23103859	Coil (Ferrite Bead), TEM2011
L857	23103859	Coil (Ferrite Bead), TEM2011
L858	23103859	Coil (Ferrite Bead), TEM2011
L859	23103775	Coil (Ferrite Bead), TEM2014
L860	23103775	Coil (Ferrite Bead), TEM2014
L883	23103859	Coil (Ferrite Bead), TEM2011
L884	23248073	Coil, Choke, TLN3299D
L885	23248073	Coil, Choke, TLN3299D
L886	23103775	Coil (Ferrite Bead), TEM2014
L888	23103859	Coil (Ferrite Bead), TEM2011
L891	23103859	Coil (Ferrite Bead), TEM2011
L896	23103859	Coil (Ferrite Bead), TEM2011
L911	23237987	Coil, Peaking, TRF4100AC
L961	23289100	Coil, Peaking, TRF4100AF
L962	23237991	Coil, Peaking, TRF4479AC
L963	23237975	Coil, Peaking, TRF4101AC
L7701	23103859	Coil (Ferrite Bead), TEM2011
L7702	23103859	Coil (Ferrite Bead), TEM2011
L7703	23103859	Coil (Ferrite Bead), TEM2011

Location No.	Part No.	Description
L7704	23103859	Coil (Ferrite Bead), TEM2011
L7705	23103859	Coil (Ferrite Bead), TEM2011
L7706	23103859	Coil (Ferrite Bead), TEM2011
L7709	23238562	Coil, Peaking, TRF4109AJ
L7710	23238562	Coil, Peaking, TRF4109AJ
LA01	23289100	Coil, Peaking, TRF4100AF
LB01	23262996	Coil, IF, TRF1169D
LC26	23237999	Coil, Peaking, TRF4109AC
LQ01	23238709	Coil, Peaking, TRF4270AJ
LQ02	23238718	Coil, Peaking, TRF4479AJ
LQ03	23238718	Coil, Peaking, TRF4479AJ
LQ04	23238718	Coil, Peaking, TRF4479AJ
LT01	23289339	Coil, Peaking, TRF43R3AF
LT02	23238562	Coil, Peaking, TRF4109AJ
LT03	23289150	Coil, Peaking, TRF4150AF
LT04	23238714	Coil, Peaking, TRF4100AJ
LT05	23238714	Coil, Peaking, TRF4100AJ
LT06	23238714	Coil, Peaking, TRF4100AJ
LT07	23238714	Coil, Peaking, TRF4100AJ
LT08	23103859	Coil (Ferrite Bead), TEM2011
LT09	23238714	Coil, Peaking, TRF4100AJ
LT10	23238506	Coil, Peaking, TRF4229AJ
LT11	23238714	Coil, Peaking, TRF4100AJ
LT12	23238506	Coil, Peaking, TRF4229AJ
LT13	23238506	Coil, Peaking, TRF4229AJ
LT15	23238710	Coil, Peaking, TRF4220AJ
LV01	23103824	Filter, TEM2028K
LV02	23103824	Filter, TEM2028K
LV40	23238709	Coil, Peaking, TRF4270AJ
LV41	23289270	Coil, Peaking, TRF4270AF
LV44	23238705	Coil, Peaking, TRF4560AJ
LV45	23289330	Coil, Peaking, TRF4330AF
LV47	23238705	Coil, Peaking, TRF4560AJ
LV47	23289100	Coil, Peaking, TRF4100AF
LV48	23289100	Coil, Peaking, TRF4100AF
LV50	23237983	Coil, Peaking, TRF4220AC
LV70	23289330	Coil, Peaking, TRF4330AF
LV501	23103824	Filter, TEM2028K
LV502	23103824	Filter, TEM2028K
LW02	23261974	Coil, Choke, HC5-035
LW04	23103859	Coil (Ferrite Bead), TEM2011
LW05	23103859	Coil (Ferrite Bead), TEM2011
LY01	23289100	Coil, Peaking, TRF4100AF
LY02	23289101	Coil, Peaking, TRF4101AF
LZ01	23238712	Coil, Peaking, TRF4150AJ
LZ02	23238716	Coil, Peaking, TRF4689AJ
LZ03	23238716	Coil, Peaking, TRF4689AJ
LZ04	23238709	Coil, Peaking, TRF4270AJ
LZ05	23238716	Coil, Peaking, TRF4689AJ
LZ06	23238709	Coil, Peaking, TRF4270AJ
LZ07	23238709	Coil, Peaking, TRF4270AJ
LZ08	23238707	Coil, Peaking, TRF4390AJ
LZ09	70131060	Filter, ZBF253D-00
LZ10	70131060	Filter, ZBF253D-00
LZ11	23238709	Coil, Peaking, TRF4270AJ
T400	23224364	Transformer, Focus, TLN2168AH
T401	23224367	Transformer, Horiz. Drive, TLN1098AH
⚠ T461	23236552	Transformer, Flyback, TFB3078BD
T461A	23192940	Anode Cap, TCC5157
T461B	23960136	Adhesive, TSE3843-W

Location No.	Part No.	Description
⚠ T461Z	23236508	Transformer, Flyback, TFB3078ZD
⚠ T801	23211712	Line Filter, TRF3209BQ
⚠ T802	23211712	Line Filter, TRF3209BQ
⚠ T803	23211713	Line Filter, TRF3197AQ
⚠ T862	23217325	Transformer, Converter, TPW3345AM
⚠ T863	23217326	Transformer, Converter, TPW3346AM

SEMICONDUCTORS

Q201	23114528	Transistor, 2SC1740S-Q
Q202	23114530	Transistor, 2SA933S-Q
Q203	A6734590	Transistor, 2SC752(G)TM-Y
Q204	23114528	Transistor, 2SC1740S-Q
Q261	23114528	Transistor, 2SC1740S-Q
Q262	23114530	Transistor, 2SA933S-Q
Q263	23114530	Transistor, 2SA933S-Q
Q301	23319787	IC, LA7833S
Q301B	70391355	Screw, BITTB3X8SZN
Q302	B0384625	IC, TA8859CP
Q340	23114528	Transistor, 2SC1740S-Q
Q341	23114530	Transistor, 2SA933S-Q
Q350	23114528	Transistor, 2SC1740S-Q
Q351	23114530	Transistor, 2SA933S-Q
Q352	A6002030	Transistor, RN1203
Q353	A6002030	Transistor, RN1203
Q354	A6534145	Transistor, 2SA1020-Y(C)
Q360	B0350510	IC, TA75458S
Q361	23314548	Transistor, 2SC4256
Q370	23114530	Transistor, 2SA933S-Q
Q402	A6330069	Transistor, 2SC2482 FA-1
Q404	A6872801	Transistor, 2SD2253(FA)
Q404B	72471082	Screw, BRDT2W3X10 SZN
Q420	23314141	Transistor, 2SC3852
Q420B	70391356	Screw, BITTB3X10 SZN
Q421	23114528	Transistor, 2SC1740S-Q
Q430	23314707	Transistor, 2SD1944-H
Q430A	23960136	Adhesive, TSE3843-W
Q460	23314850	Transistor, 2SA1788-E
Q460B	72471082	Screw, BRDT2W3X10 SZN
Q461	23114528	Transistor, 2SC1740S-Q
Q462	23114528	Transistor, 2SC1740S-Q
Q463	23114528	Transistor, 2SC1740S-Q
Q464	23114530	Transistor, 2SA933S-Q
Q470	23114528	Transistor, 2SC1740S-Q
Q480	23314246	Transistor, 2SC2023 LF-4
Q483	B0350510	IC, TA75458S
Q501	B0385677	IC, TA1222BN
Q502	23114528	Transistor, 2SC1740S-Q
Q503	23114528	Transistor, 2SC1740S-Q
Q506	B0470532	IC, TC4053BP
Q507	23114530	Transistor, 2SA933S-Q
Q508	23114530	Transistor, 2SA933S-Q
Q509	23114530	Transistor, 2SA933S-Q
Q510	23114528	Transistor, 2SC1740S-Q
Q511	23114528	Transistor, 2SC1740S-Q
Q512	23114528	Transistor, 2SC1740S-Q
Q513	23114528	Transistor, 2SC1740S-Q
Q514	23114528	Transistor, 2SC1740S-Q
Q530	B0470532	IC, TC4053BP
Q531	23114528	Transistor, 2SC1740S-Q
Q532	23114528	Transistor, 2SC1740S-Q
Q533	23114528	Transistor, 2SC1740S-Q

Location No.	Part No.	Description
Q601	23318413	IC, LA4282
Q612	23114530	Transistor, 2SA933S-Q
Q681	A6342206	Transistor, 2SC2878-A(TE
Q682	A6342206	Transistor, 2SC2878-A(TE
Q702	23114528	Transistor, 2SC1740S-Q
Q751	23905094	IC, STK392-110
Q752	23905094	IC, STK392-110
Q754	23904521	IC, AN7805
Q754B	70391355	Screw, BITTB3X8SZN
Q755	23904525	IC, AN7809
Q755B	70391355	Screw, BITTB3X8SZN
Q756	23318841	IC, AN79M09F
Q756B	70391355	Screw, BITTB3X8SZN
Q757	23114528	Transistor, 2SC1740S-Q
Q758	23114528	Transistor, 2SC1740S-Q
Q759	23114530	Transistor, 2SA933S-Q
Q761	23114530	Transistor, 2SA933S-Q
Q762	23114528	Transistor, 2SC1740S-Q
Q764	B0487045	IC, TC74HC4049AP
Q765	23114528	Transistor, 2SC1740S-Q
Q766	23114528	Transistor, 2SC1740S-Q
Q767	B0470662	IC, TC4066BP
Q768	23114530	Transistor, 2SA933S-Q
Q769	23114528	Transistor, 2SC1740S-Q
Q770	23114530	Transistor, 2SA933S-Q
Q771	A6533730	Transistor, 2SA1012-Y
Q771B	23035308	Screw, BTB3X8SZN
Q780	23114530	Transistor, 2SA933S-Q
Q781	23114528	Transistor, 2SC1740S-Q
Q782	23114528	Transistor, 2SC1740S-Q
Q801	23905084	IC, STR-S6709
Q801B	70391356	Screw, BITTB3X10 SZN
Q802	23314707	Transistor, 2SD1944-H
Q803	23904247	IC, STR-S6708
Q803B	23037312	Screw, PB4X07X10SBN
Q804	23314707	Transistor, 2SD1944-H
⚠Q826	A8643108	Photo Coupler, TLP621(GR-LF
⚠Q828	A8643108	Photo Coupler, TLP621(GR-LF
Q829	23114530	Transistor, 2SA933S-Q
Q831	23904521	IC, AN7805
Q831B	70391356	Screw, BITTB3X10 SZN
Q832	23905977	IC, PQ09RD11
Q832B	70391356	Screw, BITTB3X10 SZN
Q834	23905977	IC, PQ09RD11
Q834B	70391355	Screw, BITTB3X8SZN
Q835	23319941	IC, SI-3050C
Q835B	70391355	Screw, BITTB3X8SZN
Q836	23114528	Transistor, 2SC1740S-Q
Q837	A6000010	Transistor, RN1001
Q845	A6000050	Transistor, RN1005
Q846	23114528	Transistor, 2SC1740S-Q
Q850	23114530	Transistor, 2SA933S-Q
Q851	23319306	IC, SE012N
Q852	23318299	IC, L78MR05
Q852C	23035308	Screw, BTB3X8SZN
Q855	23114528	Transistor, 2SC1740S-Q
Q857	23114528	Transistor, 2SC1740S-Q
Q858	A6002050	Transistor, RN1205
Q859	23114528	Transistor, 2SC1740S-Q
Q860	A6000050	Transistor, RN1005
Q875	70129444	IC, PST994D
Q901	A678971D	Transistor, 2SC1569 FA-5
Q902	23114528	Transistor, 2SC1740S-Q
Q911	A678971D	Transistor, 2SC1569 FA-5

Location No.	Part No.	Description
Q913	23114528	Transistor, 2SC1740S-Q
Q914	A6321265	Transistor, 2SC2120-Y(TE)
Q915	23314234	Transistor, 2SA1020Y-CN
Q917	23114528	Transistor, 2SC1740S-Q
Q918	23114530	Transistor, 2SA933S-Q
Q919	23114528	Transistor, 2SC1740S-Q
Q920	23114530	Transistor, 2SA933S-Q
Q921	A678971D	Transistor, 2SC1569 FA-5
Q922	23114528	Transistor, 2SC1740S-Q
Q925	23114528	Transistor, 2SC1740S-Q
Q926	23114528	Transistor, 2SC1740S-Q
Q961	23114528	Transistor, 2SC1740S-Q
Q962	A6509154	Transistor, 2SA562TM-Y(T)
Q963	23114528	Transistor, 2SC1740S-Q
Q964	23114530	Transistor, 2SA933S-Q
Q965	23114528	Transistor, 2SC1740S-Q
Q966	23114530	Transistor, 2SA933S-Q
Q8501	23114528	Transistor, 2SC1740S-Q
Q9098	23114528	Transistor, 2SC1740S-Q
Q9601	23114530	Transistor, 2SA933S-Q
Q9602	23114530	Transistor, 2SA933S-Q
Q9605	23114528	Transistor, 2SC1740S-Q
Q9606	23114530	Transistor, 2SA933S-Q
QA01	23906724	IC, TMP87CS38N-3610
QA02	23906147	IC, CAT24C16P
QB01	23114528	Transistor, 2SC1740S-Q
QB02	23114530	Transistor, 2SA933S-Q
QB03	A6002050	Transistor, RN1205
QB65	23114528	Transistor, 2SC1740S-Q
QB66	A6002040	Transistor, RN1204
QB71	A6342206	Transistor, 2SC2878-A(TE
QB72	A6342206	Transistor, 2SC2878-A(TE
QB73	23114530	Transistor, 2SA933S-Q
QB81	A6342206	Transistor, 2SC2878-A(TE
QB82	A6342206	Transistor, 2SC2878-A(TE
QB83	23114530	Transistor, 2SA933S-Q
QB84	23114528	Transistor, 2SC1740S-Q
QB85	23114530	Transistor, 2SA933S-Q
QB86	23114530	Transistor, 2SA933S-Q
QB87	23114530	Transistor, 2SA933S-Q
QB88	23114530	Transistor, 2SA933S-Q
QB91	23904659	IC, UPD74HC32C
QB92	23114528	Transistor, 2SC1740S-Q
QB93	23114530	Transistor, 2SA933S-Q
QB94	23114530	Transistor, 2SA933S-Q
QB95	23114530	Transistor, 2SA933S-Q
QB96	23114530	Transistor, 2SA933S-Q
QD80	23114530	Transistor, 2SA933S-Q
QG01	B0385643	IC, TA1216AN
QG02	23114528	Transistor, 2SC1740S-Q
QG03	23114528	Transistor, 2SC1740S-Q
QQ01	B0385755	IC, TA1229N
QQ02	B0383881	IC, TA8772AN
QQ03	23114528	Transistor, 2SC1740S-Q
QQ04	23114528	Transistor, 2SC1740S-Q
QR01	B0487584	IC, TC74HC4053AP
QR04	23114530	Transistor, 2SA933S-Q
QR05	23114530	Transistor, 2SA933S-Q
QR06	23114530	Transistor, 2SA933S-Q
QR15	23114530	Transistor, 2SA933S-Q
QR17	23114528	Transistor, 2SC1740S-Q
QR18	A6734590	Transistor, 2SC752(G)TM-Y
QR19	A6734590	Transistor, 2SC752(G)TM-Y
QR20	23114528	Transistor, 2SC1740S-Q

Location No.	Part No.	Description
QR21	23114528	Transistor, 2SC1740S-Q
QR22	23114528	Transistor, 2SC1740S-Q
QS01	A6342206	Transistor, 2SC2878-A(TE
QS02	A6342206	Transistor, 2SC2878-A(TE
QS03	A6010040	Transistor, RN2004
QS04	23114528	Transistor, 2SC1740S-Q
QS05	23114528	Transistor, 2SC1740S-Q
QS67	B0350000	IC, TA75458P
QS601	23114528	Transistor, 2SC1740S-Q
QS602	23114528	Transistor, 2SC1740S-Q
QS603	A6342206	Transistor, 2SC2878-A(TE
QS604	A6342206	Transistor, 2SC2878-A(TE
QS605	A6010040	Transistor, RN2004
QS672	A6342206	Transistor, 2SC2878-A(TE
QS673	A6010040	Transistor, RN2004
QT01	23904899	IC, SAA5281ZP/E
QT02	23114528	Transistor, 2SC1740S-Q
QT03	23114528	Transistor, 2SC1740S-Q
QT04	23114530	Transistor, 2SA933S-Q
QT05	23114528	Transistor, 2SC1740S-Q
QT06	23114530	Transistor, 2SA933S-Q
QV01	B0385650	IC, TA1218N
QV03	A6002030	Transistor, RN1203
QV05	A6002030	Transistor, RN1203
QV10	23114528	Transistor, 2SC1740S-Q
QV11	23114528	Transistor, 2SC1740S-Q
QV12	23114528	Transistor, 2SC1740S-Q
QV13	23114528	Transistor, 2SC1740S-Q
QV14	A6002030	Transistor, RN1203
QV40	23114528	Transistor, 2SC1740S-Q
QV41	23114528	Transistor, 2SC1740S-Q
QV42	23114530	Transistor, 2SA933S-Q
QV43	23114530	Transistor, 2SA933S-Q
QV47	23114530	Transistor, 2SA933S-Q
QV49	23114528	Transistor, 2SC1740S-Q
QV50	23114528	Transistor, 2SC1740S-Q
QV51	23114528	Transistor, 2SC1740S-Q
QV52	A6342206	Transistor, 2SC2878-A(TE
QV70	A6342206	Transistor, 2SC2878-A(TE
QV502	23114528	Transistor, 2SC1740S-Q
QV503	23114528	Transistor, 2SC1740S-Q
QV504	23114530	Transistor, 2SA933S-Q
QV509	23114528	Transistor, 2SC1740S-Q
QV510	23114530	Transistor, 2SA933S-Q
QV512	23114528	Transistor, 2SC1740S-Q
QV520	23114528	Transistor, 2SC1740S-Q
QW06	23114528	Transistor, 2SC1740S-Q
QW07	A6734590	Transistor, 2SC752(G)TM-Y
QW09	23114528	Transistor, 2SC1740S-Q
QW10	23114530	Transistor, 2SA933S-Q
QW19	23114528	Transistor, 2SC1740S-Q
QW20	23114528	Transistor, 2SC1740S-Q
QW51	23314701	Transistor, 2SA1186A
QW52	23314705	Transistor, 2SD1763A
QY601	23318255	IC, μPC1406HA
QY602	B0350000	IC, TA75458P
QY604	A6342206	Transistor, 2SC2878-A(TE
QY605	23114530	Transistor, 2SA933S-Q
QY606	A6010040	Transistor, RN2004
QZ01	B0410688	IC, TC9090AN
QZ02	23319504	IC, MM1031XS
QZ03	23114528	Transistor, 2SC1740S-Q
QZ04	23114528	Transistor, 2SC1740S-Q
QZ05	23114528	Transistor, 2SC1740S-Q

Location No.	Part No.	Description
QZ06	23114528	Transistor, 2SC1740S-Q
D101	23316411	Diode, 1SS184
D201	23118859	Diode, 1SS133
D215	23118859	Diode, 1SS133
D216	23118859	Diode, 1SS133
D217	23118859	Diode, 1SS133
D218	23118859	Diode, 1SS133
D219	23118859	Diode, 1SS133
D220	23118859	Diode, 1SS133
D221	23316687	Diode, Zener, MTZJ9.1B
D222	23316687	Diode, Zener, MTZJ9.1B
D301	23118094	Diode, EU2A
D302	23118094	Diode, EU2A
D303	23118859	Diode, 1SS133
D308	23118822	Diode, ERB12-02
D309	23118822	Diode, ERB12-02
D312	23118859	Diode, 1SS133
D315	23118859	Diode, 1SS133
D332	23316794	Diode, SC570A
D340	23118859	Diode, 1SS133
D341	23316675	Diode, Zener, MTZJ6.2B
D350	23118859	Diode, 1SS133
D351	23118859	Diode, 1SS133
D352	23118859	Diode, 1SS133
D353	23316672	Diode, Zener, MTZJ5.6B
D354	23118859	Diode, 1SS133
D357	23118859	Diode, 1SS133
D360	23316678	Diode, Zener, MTZJ6.8B
D370	23316672	Diode, Zener, MTZJ5.6B
D406	A7978850	Diode, S5295G
D408	A7580658	Diode, 3JH41
D427	23316680	Diode, Zener, MTZJ7.5A
D430	23316670	Diode, Zener, MTZJ5.1C
D431	23118859	Diode, 1SS133
D432	23316670	Diode, Zener, MTZJ5.1C
D438	23118094	Diode, EU2A
D441	23316726	Diode, Zener, MTZJ15C
D442	A7568200	Diode, 1S1832
D442	23118859	Diode, 1SS133
D443	23118338	Diode, RU4AM
D444	23118338	Diode, RU4AM
D448	23118056	Diode, AG01
D458	23115774	Diode, Zener, RD6.2E(4)
D459	23118859	Diode, 1SS133
D460	A7568480	Diode, TVR-1G
D461	23316582	Diode, ERC20-06
D463	23118859	Diode, 1SS133
D464	23316718	Diode, Zener, MTZJ12A
D465	23316718	Diode, Zener, MTZJ12A
D470	23118859	Diode, 1SS133
D471	A7568460	Diode, TVR-1B
D474	23316719	Diode, Zener, MTZJ12B
D482	23118094	Diode, EU2A
D483	23316720	Diode, Zener, MTZJ12C
D484	23118859	Diode, 1SS133
D485	23316726	Diode, Zener, MTZJ15C
D487	A7568752	Diode, 1S1887A
D488	23118859	Diode, 1SS133
D489	23316659	Diode, Zener, MTZJ3.6B
D498	23316751	Diode, Zener, MTZJ30C
D499	23316751	Diode, Zener, MTZJ30C
D601	23118859	Diode, 1SS133
D602	23118859	Diode, 1SS133
D603	23118859	Diode, 1SS133

Location No.	Part No.	Description
D604	23118859	Diode, 1SS133
D611	23118859	Diode, 1SS133
D612	23118859	Diode, 1SS133
D613	23118859	Diode, 1SS133
D614	23118859	Diode, 1SS133
D801	23316784	Diode, RBV-1506
D801B	23035308	Screw, BTB3X8SZN
D803	23118094	Diode, EU2A
D804	23316678	Diode, Zener, MTZJ6.8B
D805	23118859	Diode, 1SS133
D806	23118094	Diode, EU2A
D808	23118094	Diode, EU2A
D809	A7270200	Diode, Zener, 1Z6.2
D810	23118859	Diode, 1SS133
D811	23118859	Diode, 1SS133
D812	23118451	Diode, RU-4A
D815	23316725	Diode, Zener, MTZJ15B
D816	23316753	Diode, Zener, MTZJ33A
D817	23316753	Diode, Zener, MTZJ33A
D820	23316753	Diode, Zener, MTZJ33A
D821	23316753	Diode, Zener, MTZJ33A
D822	23316672	Diode, Zener, MTZJ5.6B
D828	23118859	Diode, 1SS133
D834	23115532	Diode, ERB12-01
D835	23115532	Diode, ERB12-01
D837	23316672	Diode, Zener, MTZJ5.6B
D839	23115532	Diode, ERB12-01
D850	23118173	Diode, RBV-406M-LFA
D852	23118094	Diode, EU2A
D853	23118094	Diode, EU2A
D854	A7270200	Diode, Zener, 1Z6.2
D855	23316725	Diode, Zener, MTZJ15B
D856	23118094	Diode, EU2A
D857	23118859	Diode, 1SS133
D858	23118094	Diode, EU2A
D859	23316678	Diode, Zener, MTZJ6.8B
D860	23118859	Diode, 1SS133
D861	23316737	Diode, Zener, MTZJ22A
D862	23118859	Diode, 1SS133
D863	23118094	Diode, EU2A
D864	23316184	Diode, FML-G12S
D864B	70391355	Screw, BITTB3X8SZN
D865	23316184	Diode, FML-G12S
D865B	70391355	Screw, BITTB3X8SZN
D867	23118094	Diode, EU2A
D868	23316714	Diode, RL2Z
D869	23118859	Diode, 1SS133
D870	23118859	Diode, 1SS133
D871	23118859	Diode, 1SS133
D872	23316678	Diode, Zener, MTZJ6.8B
D873	23316678	Diode, Zener, MTZJ6.8B
D874	23118859	Diode, 1SS133
D875	23118859	Diode, 1SS133
D876	23118859	Diode, 1SS133
D877	23118859	Diode, 1SS133
D878	23316760	Diode, Zener, MTZJ36D
D879	23316672	Diode, Zener, MTZJ5.6B
D880	23316672	Diode, Zener, MTZJ5.6B
D881	23316764	Diode, Zener, MTZJ39D
D882	23118859	Diode, 1SS133
D883	23316406	Diode, FML-G16S
D883B	70391355	Screw, BITTB3X8SZN
D885	23316184	Diode, FML-G12S
D891	23316184	Diode, FML-G12S

Location No.	Part No.	Description
D896	23118060	Diode, AL01Z
D899	24000656	Varistor, 470V
D901	23118859	Diode, 1SS133
D902	23118859	Diode, 1SS133
D903	23118859	Diode, 1SS133
D904	23118859	Diode, 1SS133
D911	23118859	Diode, 1SS133
D912	23118859	Diode, 1SS133
D913	23118859	Diode, 1SS133
D914	23118859	Diode, 1SS133
D915	23118859	Diode, 1SS133
D921	23118859	Diode, 1SS133
D922	23118859	Diode, 1SS133
D924	23118859	Diode, 1SS133
D925	23118859	Diode, 1SS133
D926	23118859	Diode, 1SS133
D927	23118859	Diode, 1SS133
D961	23118859	Diode, 1SS133
D962	23118859	Diode, 1SS133
D965	23118859	Diode, 1SS133
D966	23118859	Diode, 1SS133
D970	23118859	Diode, 1SS133
D971	23118859	Diode, 1SS133
D972	23118859	Diode, 1SS133
D973	23118859	Diode, 1SS133
D974	23118859	Diode, 1SS133
D7701	23118859	Diode, 1SS133
D7702	23115532	Diode, ERB12-01
D7705	23118859	Diode, 1SS133
D7706	23118859	Diode, 1SS133
D7707	23118859	Diode, 1SS133
D7708	23118859	Diode, 1SS133
D7709	23316675	Diode, Zener, MTZJ6.2B
D7710	23316716	Diode, Zener, MTZJ11B
D7711	23316716	Diode, Zener, MTZJ11B
D7717	23316675	Diode, Zener, MTZJ6.2B
D7718	23316675	Diode, Zener, MTZJ6.2B
D7719	23316675	Diode, Zener, MTZJ6.2B
D7720	23316675	Diode, Zener, MTZJ6.2B
D7721	23316675	Diode, Zener, MTZJ6.2B
D7722	23316675	Diode, Zener, MTZJ6.2B
D7726	23115532	Diode, ERB12-01
D7727	23115532	Diode, ERB12-01
D7728	23115532	Diode, ERB12-01
D7729	23118859	Diode, 1SS133
D7801	23118859	Diode, 1SS133
D7802	23118859	Diode, 1SS133
D7803	23118859	Diode, 1SS133
DA42	23316675	Diode, Zener, MTZJ6.2B
DA69	23316675	Diode, Zener, MTZJ6.2B
DB01	23358542	LED, 339-1EVGW
DB03	23358522	LED, SIR-56SB3F
DD80	23118859	Diode, 1SS133
DR01	23316817	Diode, 1SS120-7
DR31	23118859	Diode, 1SS133
DS671	23316739	Diode, MTZJ22C
DV01	23316686	Diode, Zener, MTZJ9.1A
DV02	23316686	Diode, Zener, MTZJ9.1A
DV03	23316686	Diode, Zener, MTZJ9.1A
DV04	23316686	Diode, Zener, MTZJ9.1A
DV05	23316686	Diode, Zener, MTZJ9.1A
DV06	23118859	Diode, 1SS133
DW04	23118859	Diode, 1SS133
DW05	23118859	Diode, 1SS133

Location No.	Part No.	Description
DW21	23118859	Diode, 1SS133
DY601	23118859	Diode, 1SS133
DY602	23118859	Diode, 1SS133
DZ01	23118622	Diode, Zener, RD10ESA B2
MISCELLANEOUS		
B107	23711305	Screw, PP3X0.5X5BNI
B202	23421896	Piece, Back, Terminal
B224	23035412	Screw, BTB4X12SZN
B225	23035412	Screw, BTB4X12SZN
B230	23037312	Screw, PB4X07X10SBN
B232	23037312	Screw, PB4X07X10SBN
B233	23035412	Screw, BTB4X12SZN
B234	23030937	Screw, BTBW3X12 SBN
B235	23030937	Screw, BTBW3X12 SBN
B237	23035412	Screw, BTB4X12SZN
B239	23035412	Screw, BTB4X12SZN
B250	23539014	Ornament, Back A
B251	23550358	Label, Model No. 50G9UXE
B251	23550427	Label, Model No. 50G9UXH
B251	23550428	Label, Model No. 50G9UXM
B251	23550426	Label, Model No. 50G9UXA
B251	23550456	Label, Model No. 61G9UXE
B251	23550457	Label, Model No. 61G9UXH
B251	23550469	Label, Model No. 61G9UXM
B251	23550391	Label, Model No. 61G9UXA
B330	23037312	Screw, PB4X07X10SBN
B332	23037312	Screw, PB4X07X10SBN
BB20	23903022	Socket, 8P, 2.5
BB20A	23368627	Plug, 8P, 2.5
BB21	23903022	Socket, 8P, 2.5
BB25	23903022	Socket, 8P, 2.5
BB25A	23368627	Plug, 8P, 2.5
BB26	23903022	Socket, 8P, 2.5
BB40	23903022	Socket, 8P, 2.5
BB40A	23368627	Plug, 8P, 2.5
BB41	23903022	Socket, 8P, 2.5
BB50	23903022	Socket, 8P, 2.5
BB50A	23368627	Plug, 8P, 2.5
BB51	23903022	Socket, 8P, 2.5
BB80	23903022	Socket, 8P, 2.5
BB80A	23368627	Plug, 8P, 2.5
BB81	23903022	Socket, 8P, 2.5
BB90	23903022	Socket, 8P, 2.5
BB90A	23368627	Plug, 8P, 2.5
BB91	23903022	Socket, 8P, 2.5
E935	23710134	Screw, PP4X0.7X8 SBZ
E943	23710134	Screw, PP4X0.7X8 SBZ
E956	23710134	Screw, PP4X0.7X8 SBZ
E966	23960136	Adhesive, TSE3843-W
E976	23960136	Adhesive, TSE3843-W
E986	23960136	Adhesive, TSE3843-W
⚠F801	23144458	Fuse, 5.0A
F801A	23165433	Holder, Fuse
⚠F802	23144870	Fuse, 2.0A, 250V
F802A	23165433	Holder, Fuse
F802B	23165433	Holder, Fuse
⚠F803	23144870	Fuse, 2.0A, 250V
F803A	23165433	Holder, Fuse
F803B	23165433	Holder, Fuse
⚠F805	23144867	Fuse, 4.0A
F805A	23165433	Holder, Fuse
F805B	23165433	Holder, Fuse
⚠F807	23144870	Fuse, 2.0A, 250V

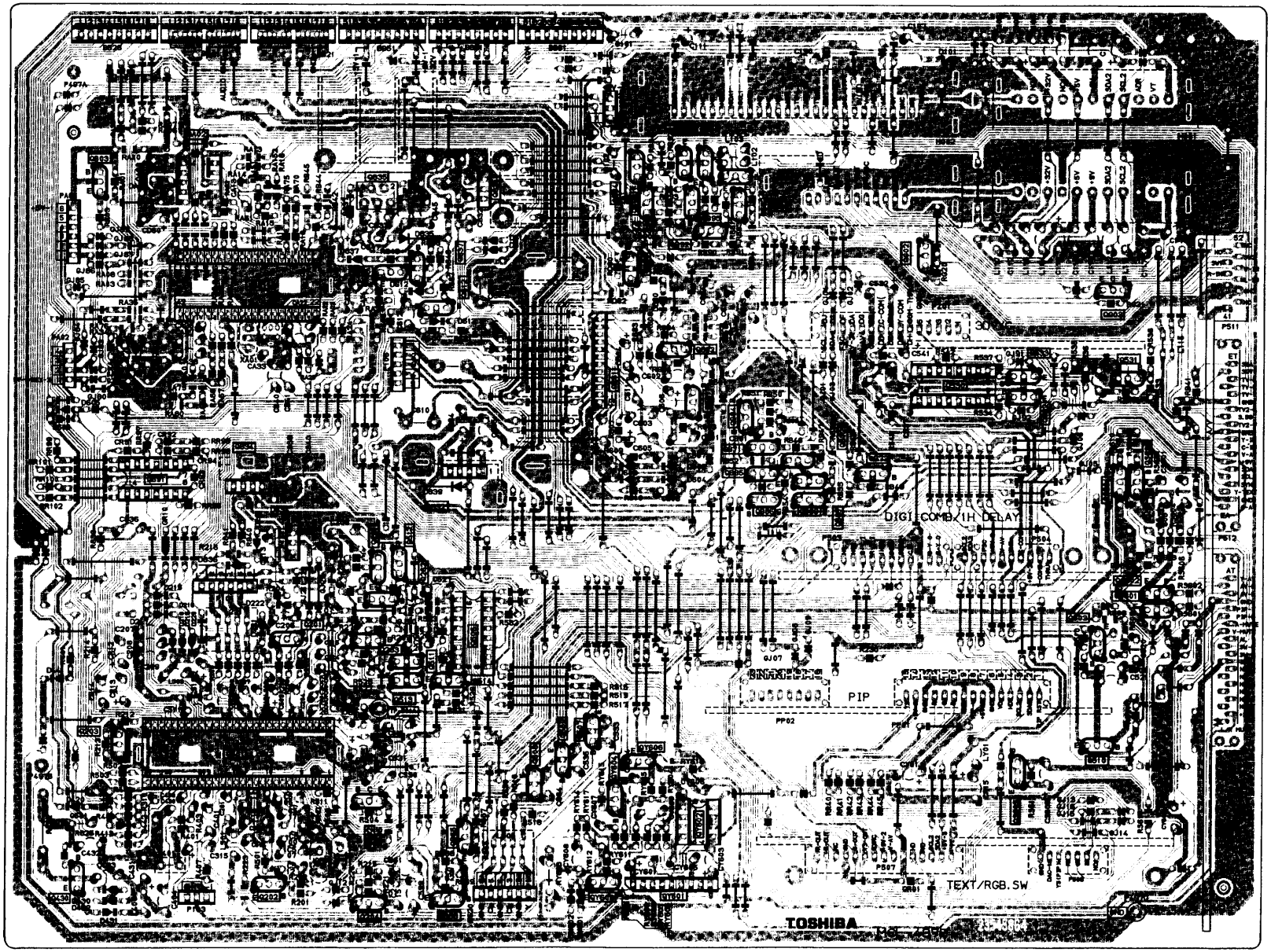
Location No.	Part No.	Description
F807A	23165433	Holder, Fuse
F807B	23165433	Holder, Fuse
⚠F809	23144873	Fuse, 1.0A
F809A	23165433	Holder, Fuse
F809B	23165433	Holder, Fuse
⚠F810	23144869	Fuse, 2.5A
F810A	23165433	Holder, Fuse
F810B	23165433	Holder, Fuse
⚠F811	23144869	Fuse, 2.5A
F811A	23165433	Holder, Fuse
F811B	23165433	Holder, Fuse
G005	23118859	Diode, 1SS133
G023	24327180	MF, 18 ohm, ±1%, 1/4W
G101	23237999	Coil, Peaking, TRF4109AC
GR01	24366561	CF, 560 ohm (50G9UXH/61G9UXH)
H002	23148337	Module, MVCS42A, MULTI IF
H003	23123922	Divider, Antenna, DAE123C
HY02	23148327	Module, MVCM13, MULTI
J801A	23960136	Adhesive, TSE3843-W
P503	23902780	Socket, 11P 2.5MM
P504	23902745	Socket, 10P 2.5MM
P506	23902852	Socket, 7P 2.5MM
P507	23902655	Socket, B-B, 15P
P512	23902863	Socket, 20P 2MM
P513	23902863	Socket, 20P 2MM
P661	23365444	Jack, Earphone
P708	23902863	Socket, 20P 2MM
P709	23902863	Socket, 20P 2MM
P713	23164787	Plug, 7P
P714	23164787	Plug, 7P
P715	23164787	Plug, 7P
P720	23164786	Plug, 6P
⚠P801	23372023	Power Cord (50G9UXE/50G9UXH)/ (61G9UXE/61G9UXH)
⚠P801	23372025	Power Cord (50G9UXM/61G9UXM)
⚠P801	23372026	Power Cord (50G9UXA)
PM01	23367724	Connector, B-B, 15P
PM02	23368511	Plug, 7P 2.5MM
PP01	23902655	Socket, B-B, 15P
PP02	23902064	Socket, 15P 2.5MM
PQ01	23368130	Plug, 10P 2.5MM
PQ02	23368530	Plug, 11P 2.5MM
PV01	23365837	Jack, 1S6P
PV02	23365966	Jack, 1S6P
PV03	23368520	Plug, 20P 2MM
PV04	23368520	Plug, 20P 2MM
PV06	23365972	Jack, 6P
PV63	23164563	Plug, 3P 2.5MM
PV520	23164560	Plug, 6P
PY630	23365444	Jack, Earphone
PZ01	23902655	Socket, B-B, 15P
S601	23145411	Switch, Slide, 2C2P
⚠S801	23145434	Switch, Power, 2C2P
SA01	23145226	Switch, Push, 1C1P
SA02	23145226	Switch, Push, 1C1P
SA03	23145226	Switch, Push, 1C1P
SA04	23145226	Switch, Push, 1C1P
SA06	23145226	Switch, Push, 1C1P
SA07	23145226	Switch, Push, 1C1P
SR80	23146547	Relay, DC12V, AC120V5A
SR81	23146547	Relay, DC12V, AC120V5A

Location No.	Part No.	Description
V901A	23902019	Socket, CRT, 10P
V902A	23902019	Socket, CRT, 10P
V903A	23902019	Socket, CRT, 10P
W661	23151232	Speaker, SPK-1235, 160x160mm, 8 ohm
W662	23151232	Speaker, SPK-1235, 160x160mm, 8 ohm
X401	23153721	Ceramic Resonator, 503kHz, TCR1023
X501	23153961	Crystal, 3.58MHz
X503	23153979	Crystal, 4.43MHz
XA01	23153325	Ceramic Resonator, 8.00M, TCR1056
XQ01	23153969	Crystal, 4MHz
XT01	23153472	Crystal, 27M
⚠Z410	23110842	Focus Pack, TPA6031
Z410A	23505177	Focus Cable
⚠Z450	24082877	CR Block, TPA5007
Z450A	23504953	Cable, Anode
Z470	23110843	Coil, Forcus, TPA6032AH
Z801	23904998	IC, HIC1016
Z868	23144539	Protector, PRF20005491, 125V, 2A
Z890	23144539	Protector, PRF20005491, 125V, 2A
ZC01	23148298	Module, CM48P15HA, CONVER (50G9UXE/UXH/UXM/UXA)
ZC01	23148300	Module, CM55P17HA, CONVER (61G9UXE/UXH/UXM/UXA)
ZT01	23153736	Ceramic Resonator, TCR1025
ZV01	23107519	Ceramic Video Trap, 4.43MHz, TCF1066
ZY01	23148321	Modul, MWPN12HA, PAL/NTSC MW
ZY02	23148339	Module, YC3D22H, 3D-YCS
PC BOARD ASSEMBLIES		
* M031Z		CRT-D/R Board, PB8501-1
* M032Z		CRT-D/G Board, PB8501-2
* M033Z		CRT-D/B Board, PB8501-3
* M034Z		SVM Board, PB8501-4
* M035Z		RMT IN Board, PB8501-5
* M036Z		Front CON Board, PB8501-6
* M037Z		Front IN Board, PB8501-7
* M080Z		Power2 Board, PB8486-1
* M081Z		AC-IN Board, PB8486-2
* U401		Def Board, PB8489 (50G9UXE/UXH/UXM/UXA)
* U401		Def Board, PB8574 (61G9UXE/UXH/UXM/UXA)
* U801		CONV/POW1 Board, PB8485
* U901		Signal Board, PB8571 (50G9UXE/UXM/UXA)
* U901		Signal Board, PB8597 (50G9UXH)
* U901		Signal Board, PB8572 (61G9UXE/UXM/UXA)
* U901		Signal Board, PB8573 (61G9UXH)
* UM01		Text Board, PB8468
* UV01		BACK/AV Board, PB8469
* UZ01		COMB/SECAM Board, PB7500

Location No.	Part No.	Description
PICTURE TUBE		
⚠V901R	23797151	Projection Coupling, 50R (50G9UXE/UXH/UXM/UXA)
⚠V901R	23797155	Projection Coupling, 61R (61G9UXE/UXH/UXM/UXA)
⚠V902G	23797152	Projection Coupling, 50G (50G9UXE/UXH/UXM/UXA)
⚠V902G	23797156	Projection Coupling, 61G (61G9UXE/UXH/UXM/UXA)
⚠V903B	23797153	Projection Coupling, 50B (50G9UXE/UXH/UXM/UXA)
⚠V903B	23797157	Projection Coupling, 61B (61G9UXE/UXH/UXM/UXA)
TUNER		
H001	23321321	Tuner, ECA12L3
HY01	23321321	Tuner, ECA12L3
ACCESSORIES		
K902	23306287	Remote Hand Unit, CT-9969 (50G9UXE/UXM/UXA)/ (61G9UXE/UXM/UXA)
K902	23306286	Remote Hand Unit, CT-9968 (50G9UXH/61G9UXH)
AT03	23588382	Battery Cover
Y101A	23563520	Owner's Manual, English, 50G9UXE/50G9UXA/61G9UXA
Y101A	23563554	Owner's Manual, English 61G9UXE/61G9UXH/61G9UXM
Y101B	23563521	Owner's Manual, Hongkong, 50G9UXH
Y101B	23563560	Owner's Manual, Hongkong, 61G9UXH
Y101B	23563523	Owner's Manual, Arabic, 50G9UXM
Y101B	23563561	Owner's Manual, Arabic, 61G9UXM
Y108	23122780	AC Adaptor, 2P (50G9UXM/61G9UXM)
Y109	23943846	Cover, POLY

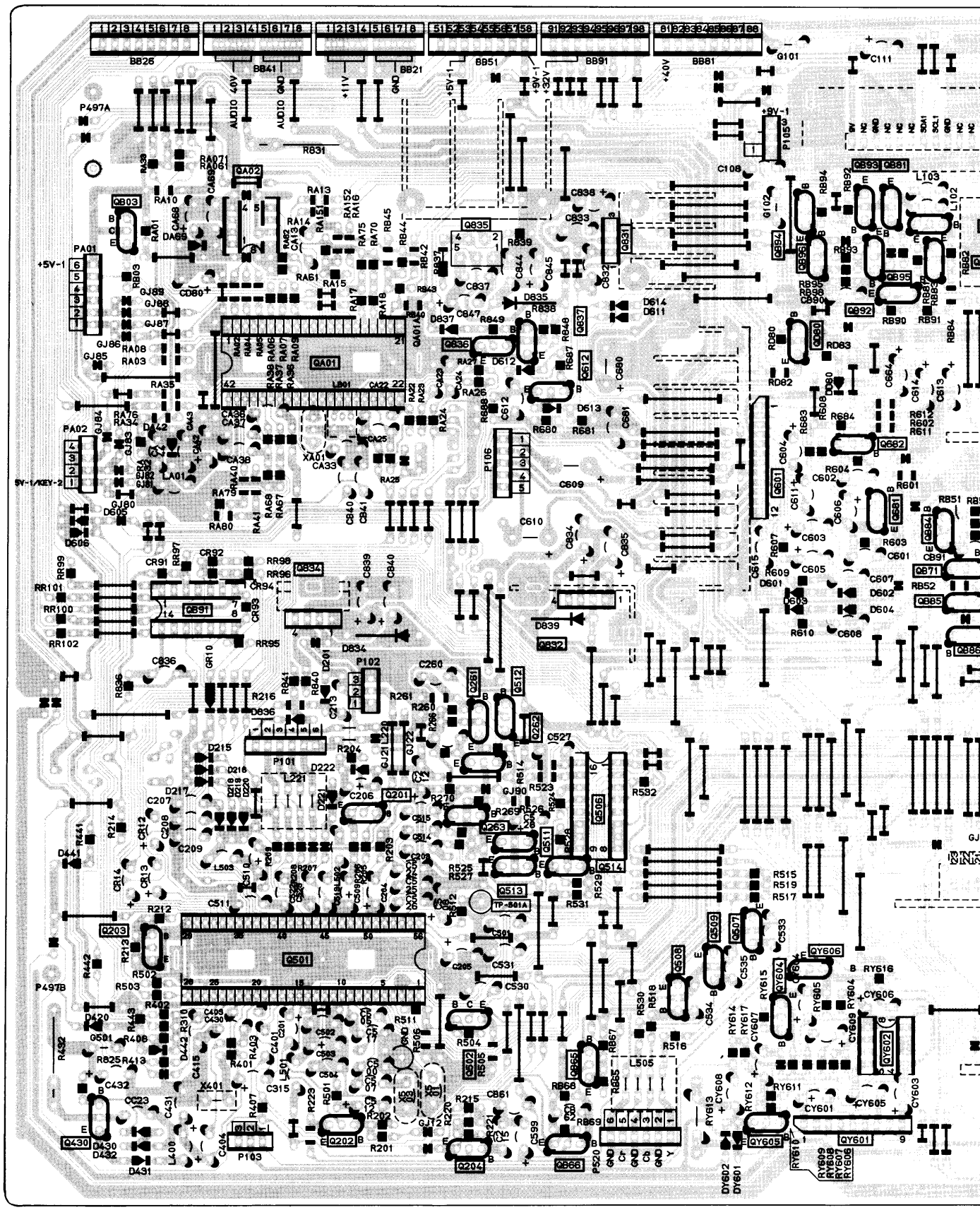
SIGNAL BOARD PB8571

BOTTOM (FOIL) SIDE



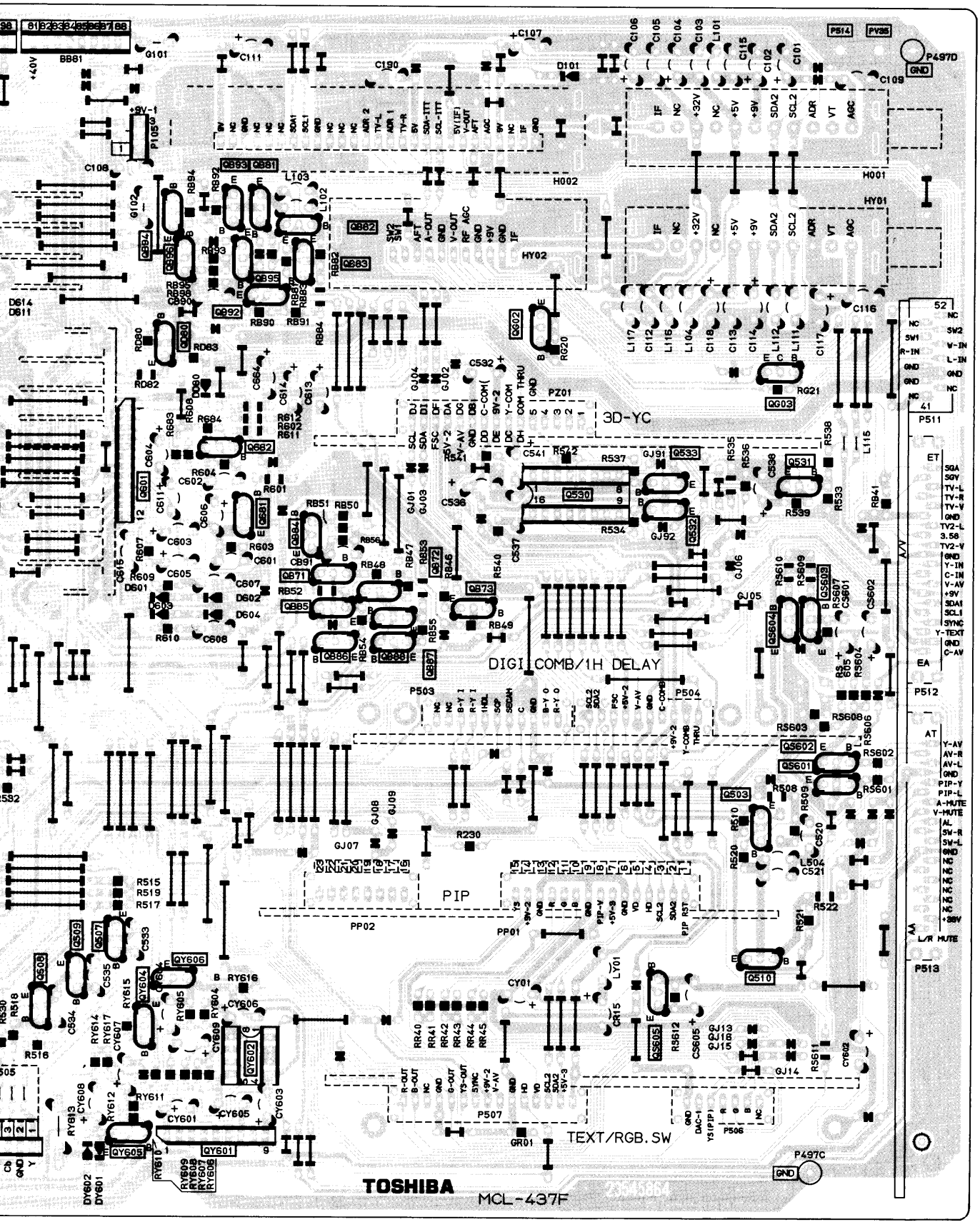
SIGNAL BOARD PB8571

BOTTOM (FOIL) SIDE



SIGNAL BOARD PB8571

BOTTOM (FOIL) SIDE



DEF BOARD PB8489

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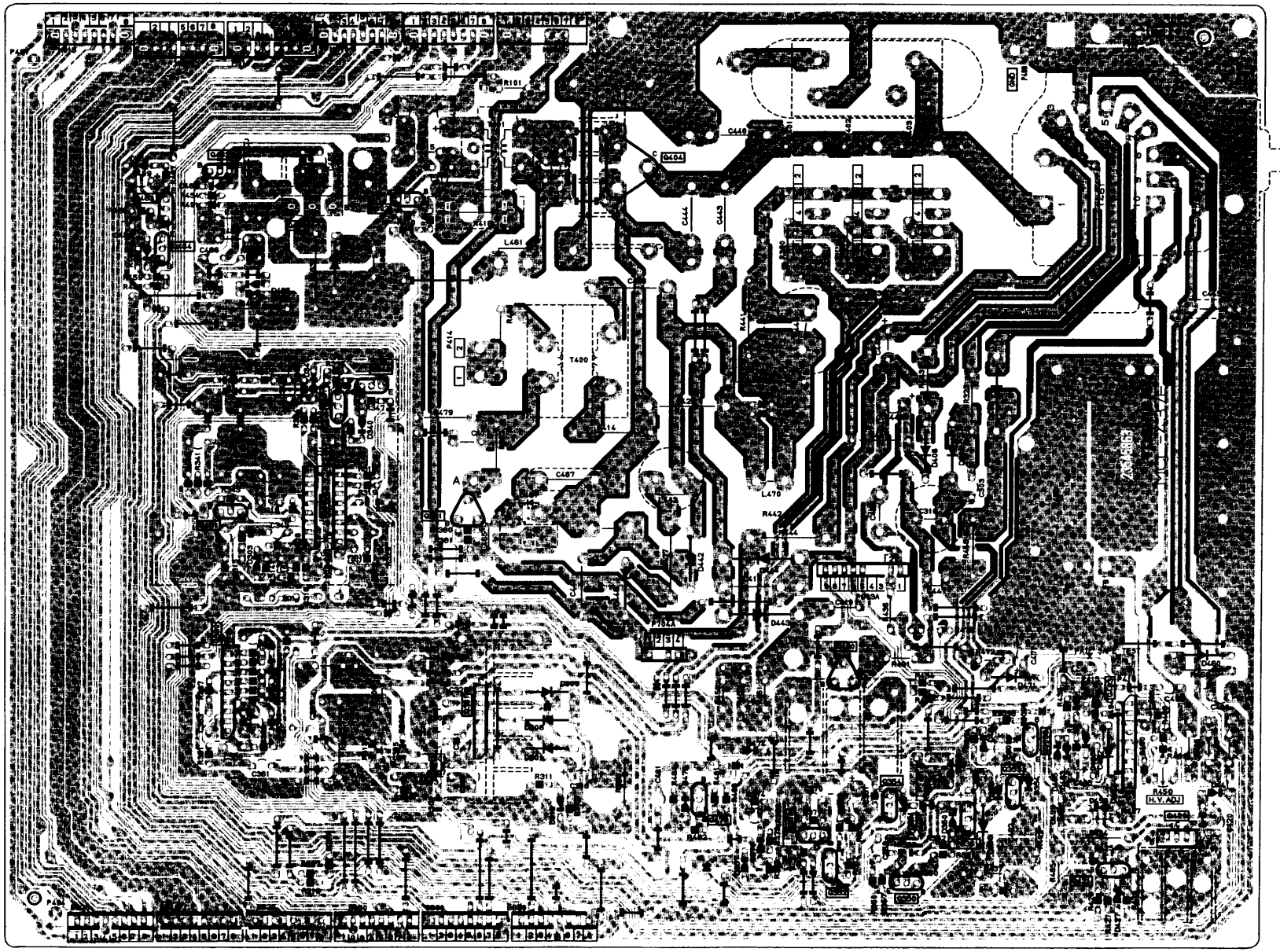

DEF BOARD PB8489

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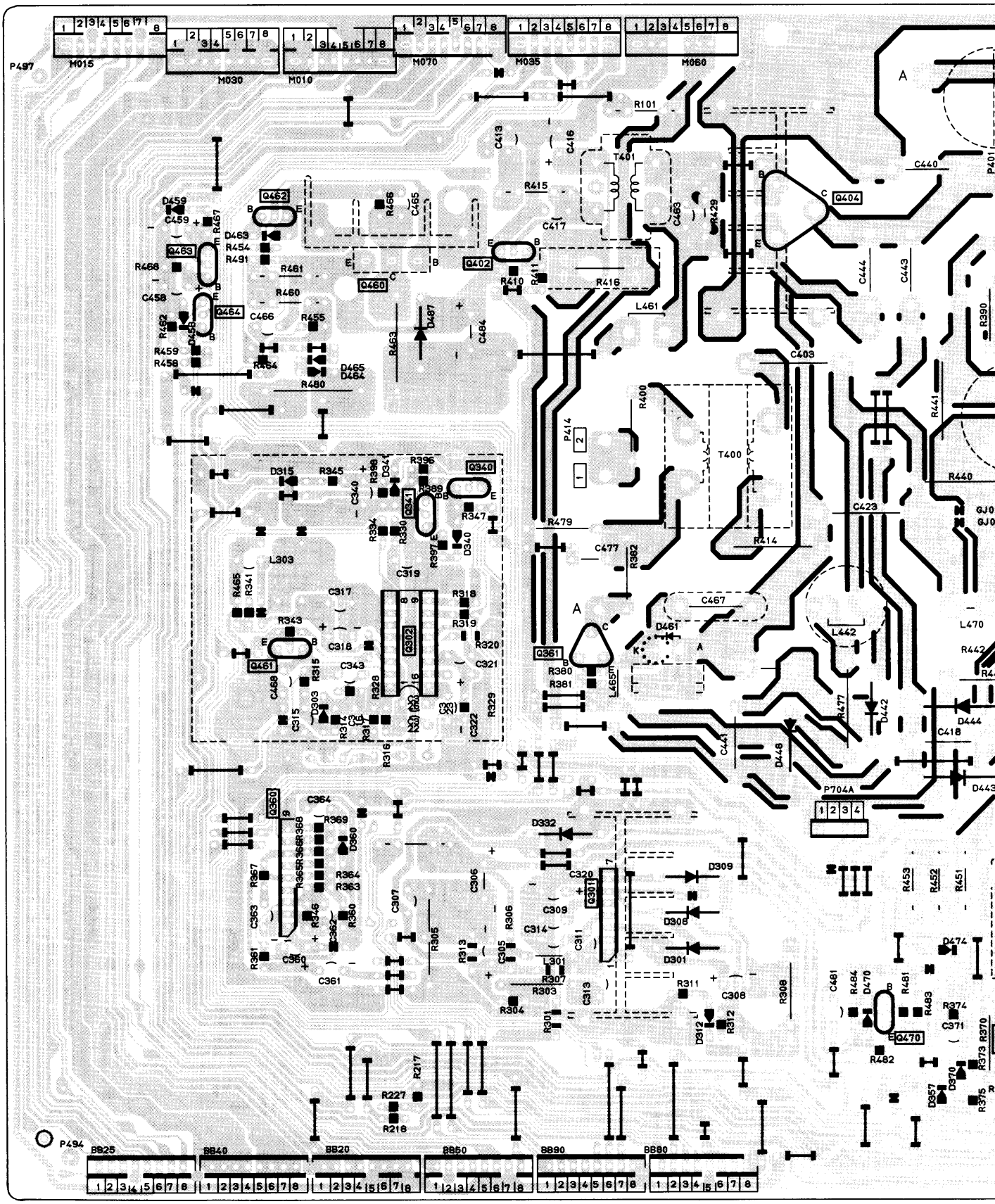

DEF BOARD PB8489

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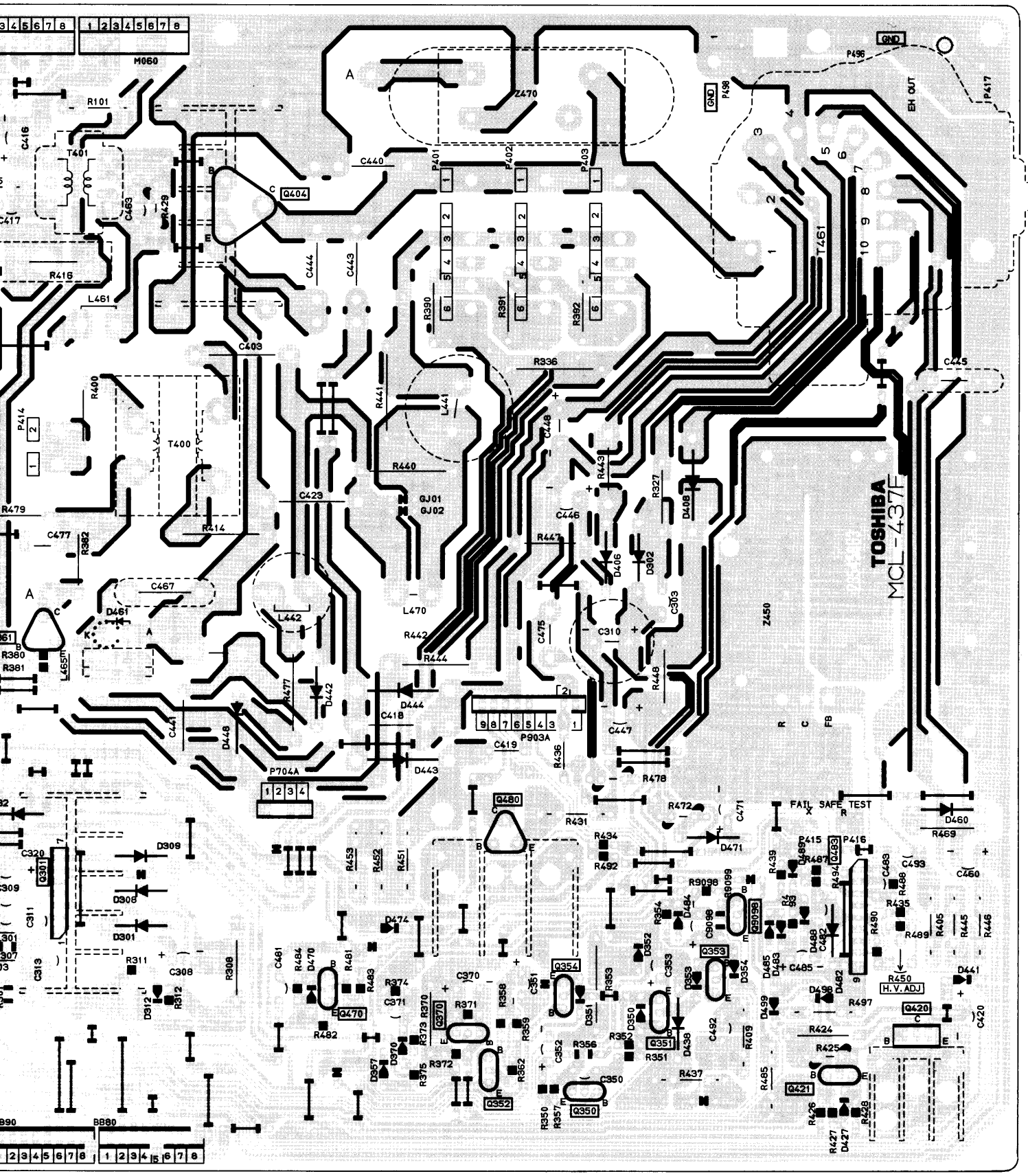

CONV/POWER1 BOARD PB8485

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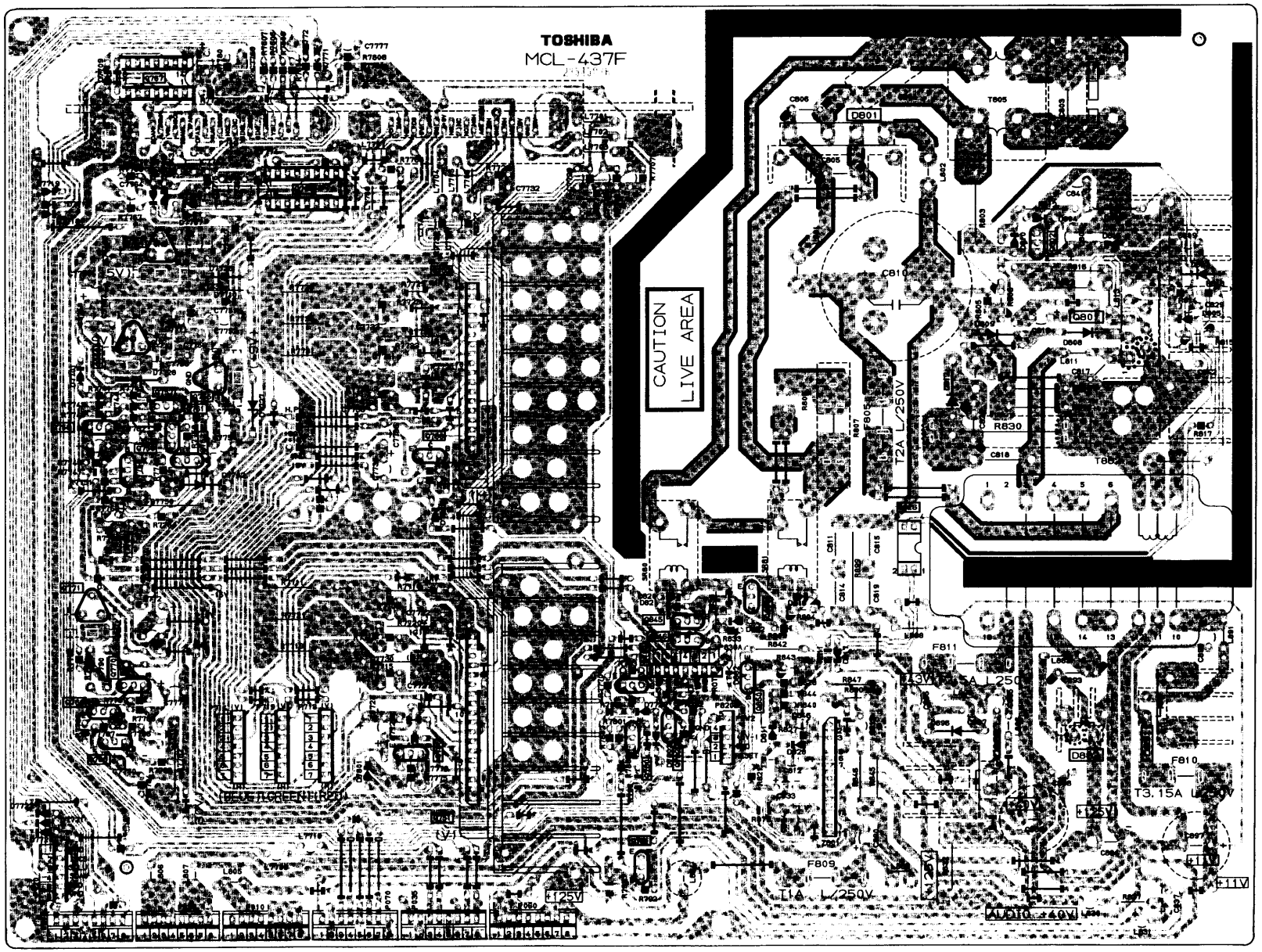

CONV/POWER1 BOARD PB8485

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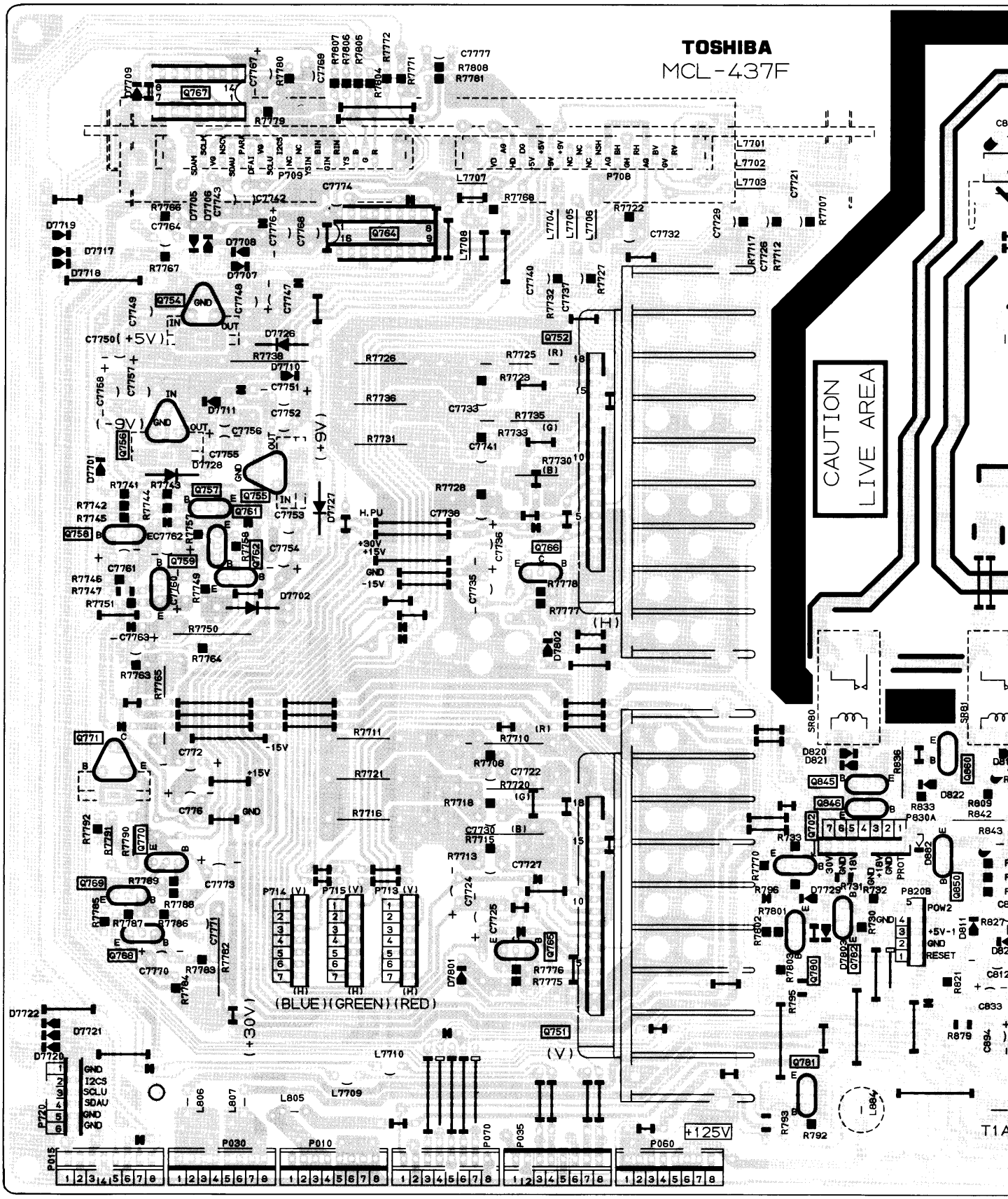

CONV/POWER1 BOARD PB8485

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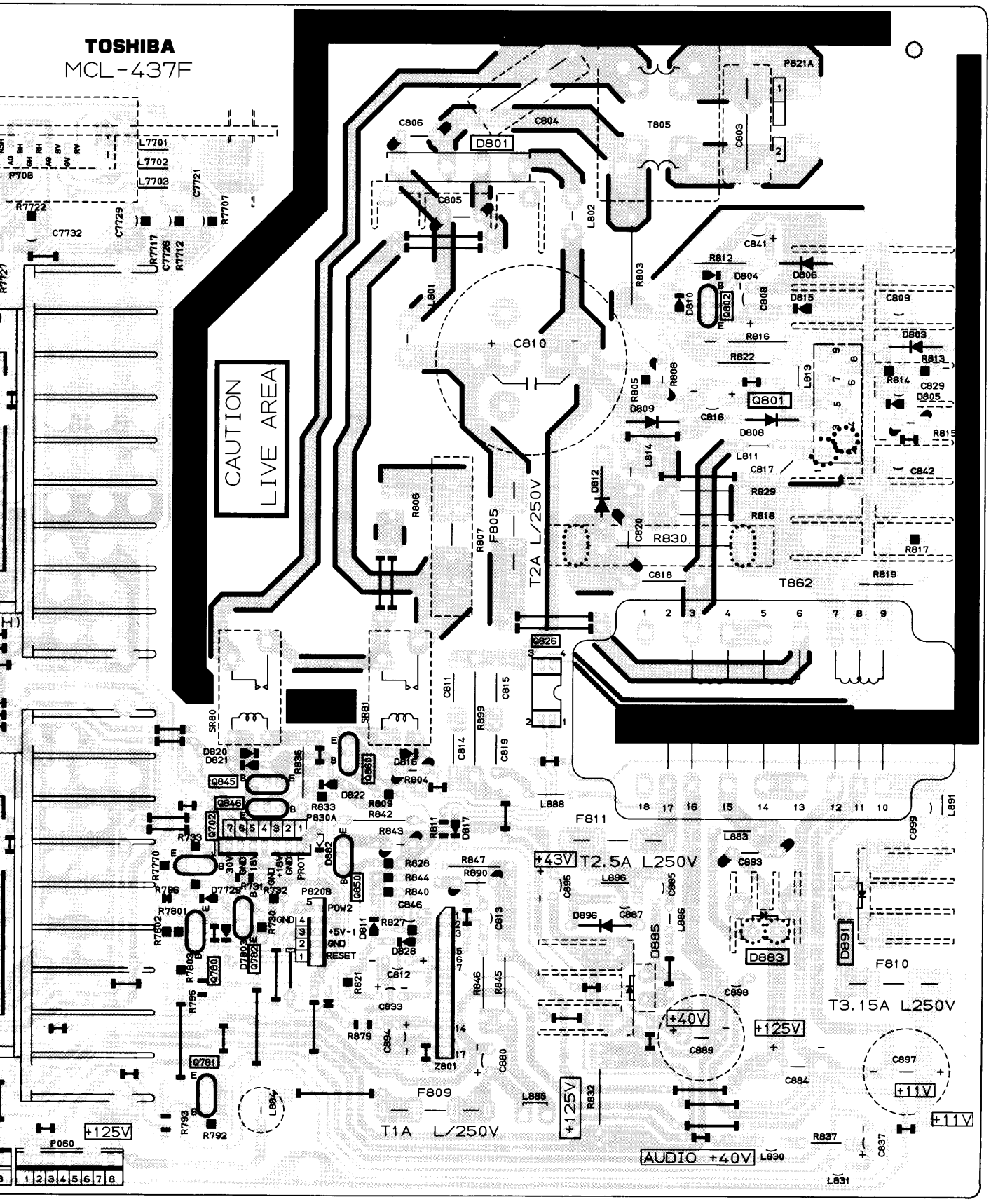
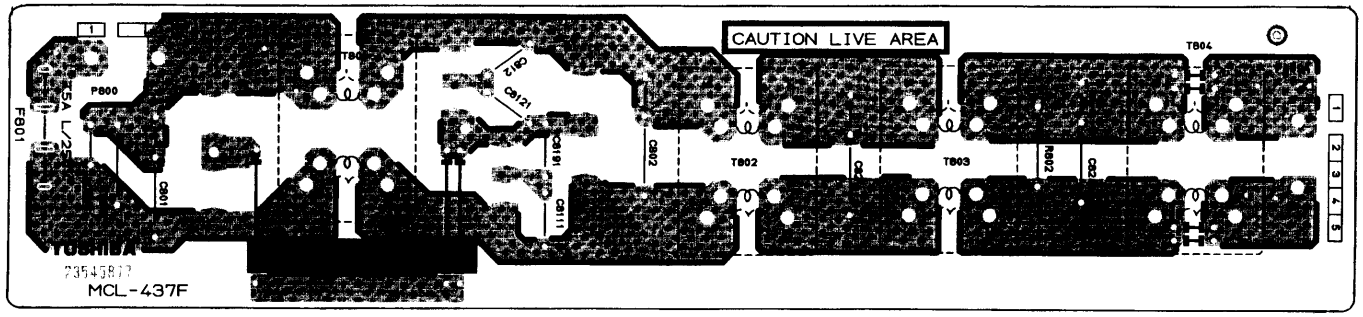


AC-IN BOARD PB8486-2

BOTTOM (FOIL) SIDE



POWER2 BOARD PB8486-1

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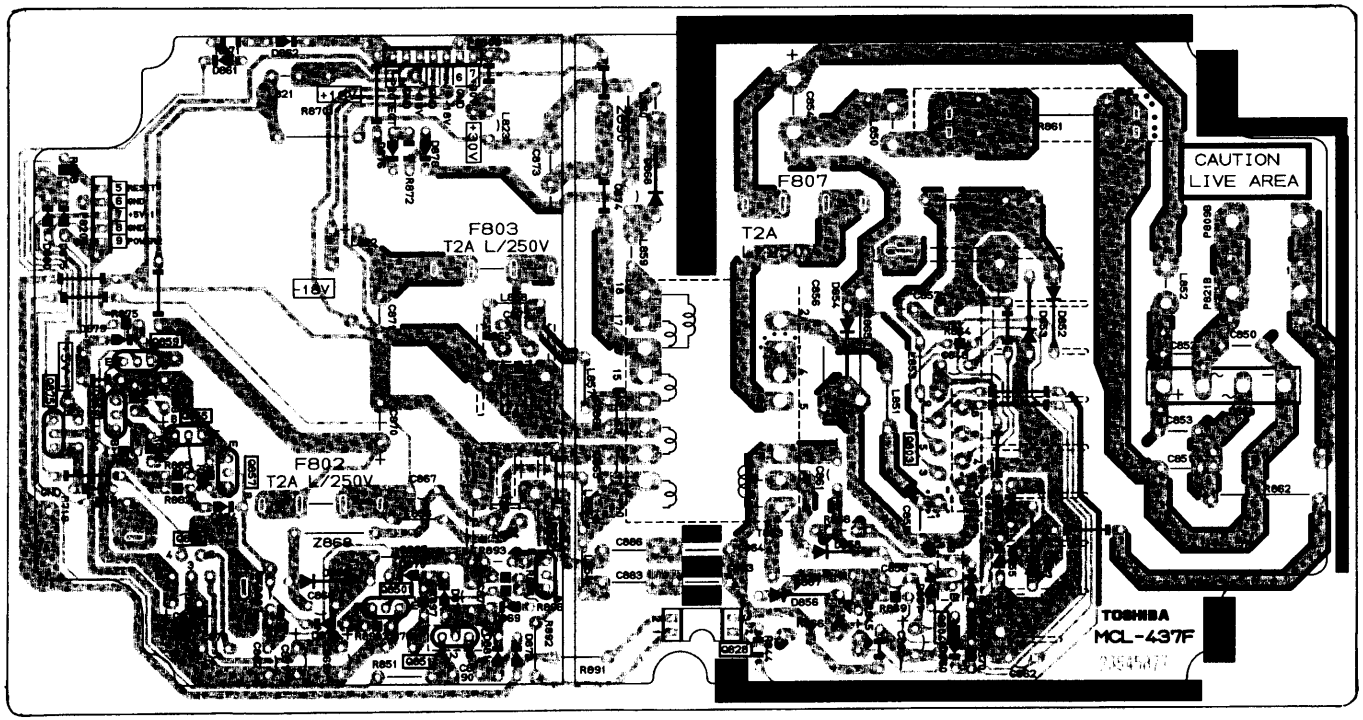
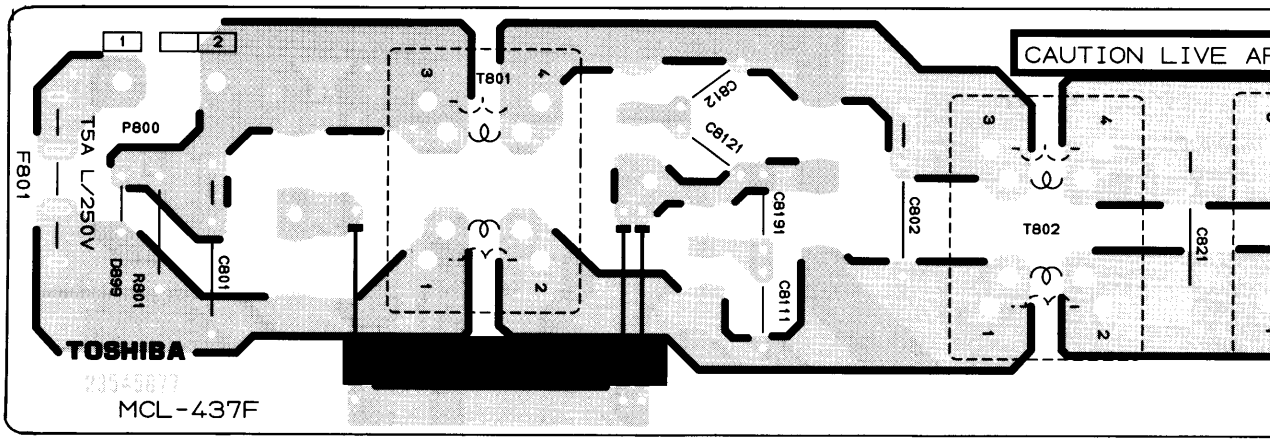


AC-IN BOARD PB8486-2

BOTTOM (FOIL) SIDE



POWER2 BOARD PB8486-1

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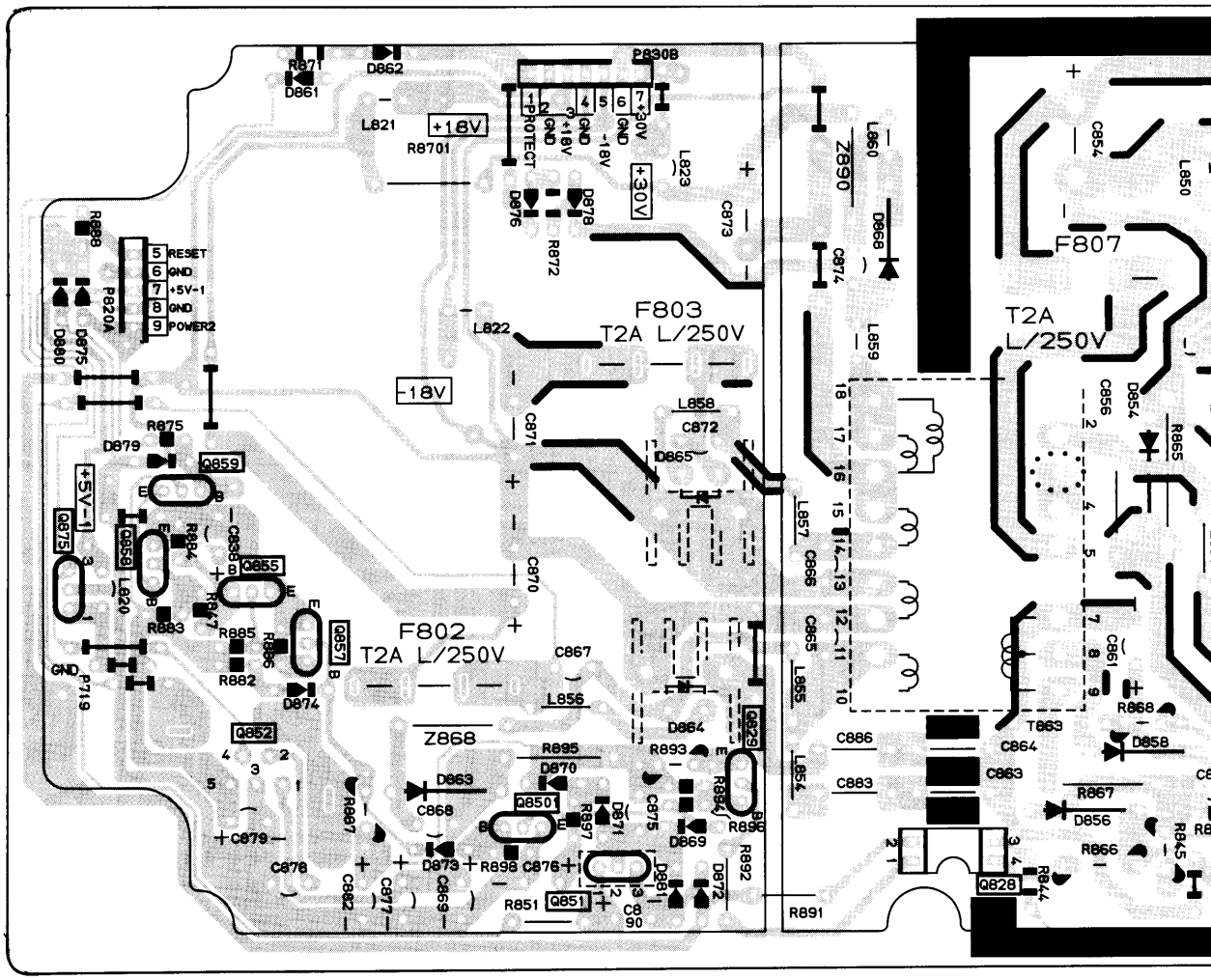

AC-IN BOARD PB8486-2

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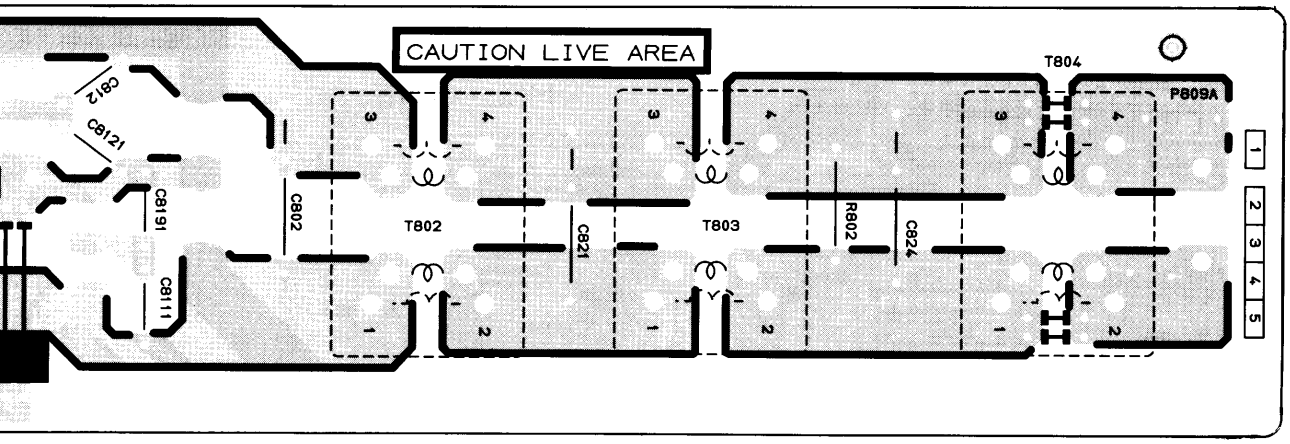

POWER2 BOARD PB8486-1

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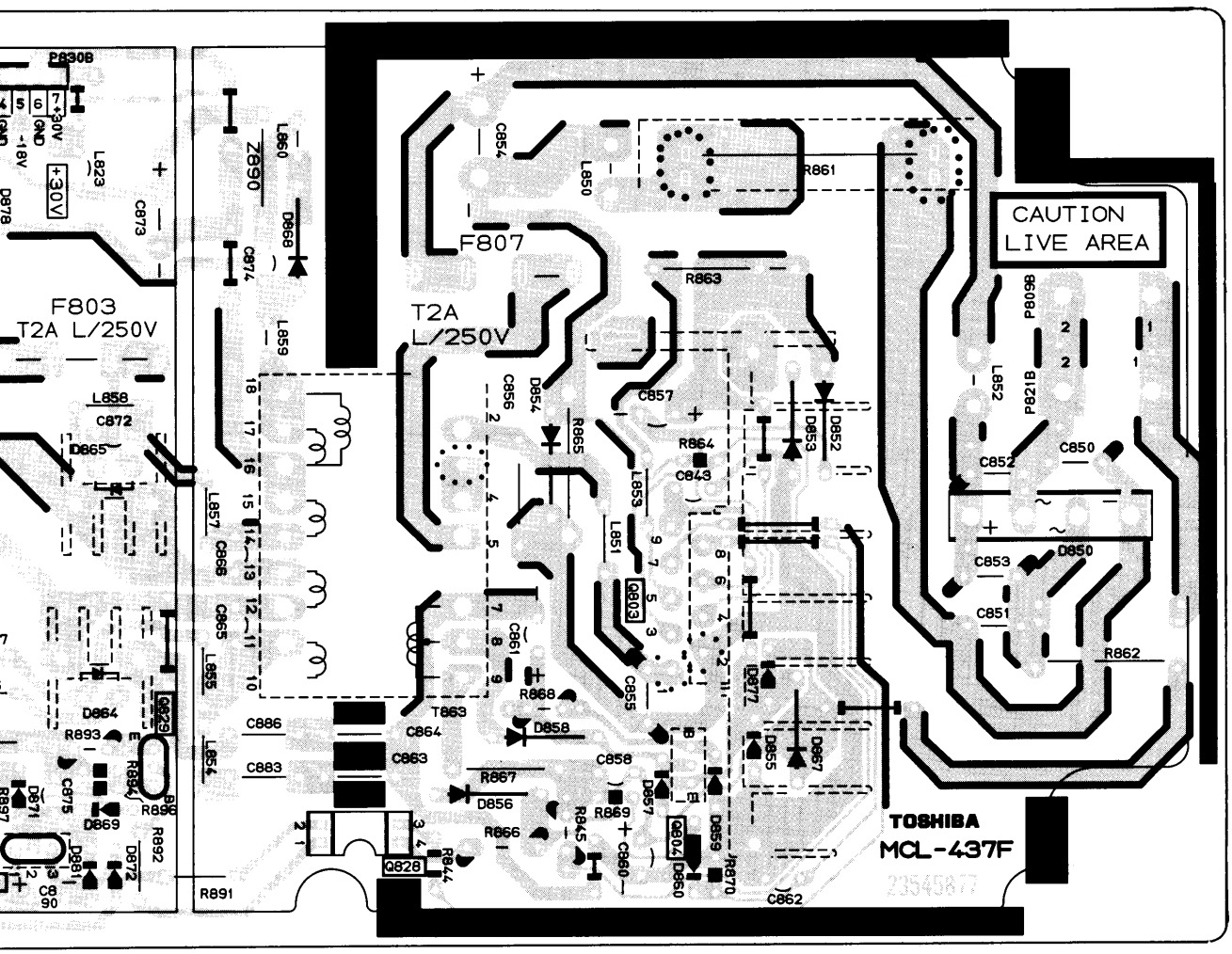

BACK/AV BOARD PB8469

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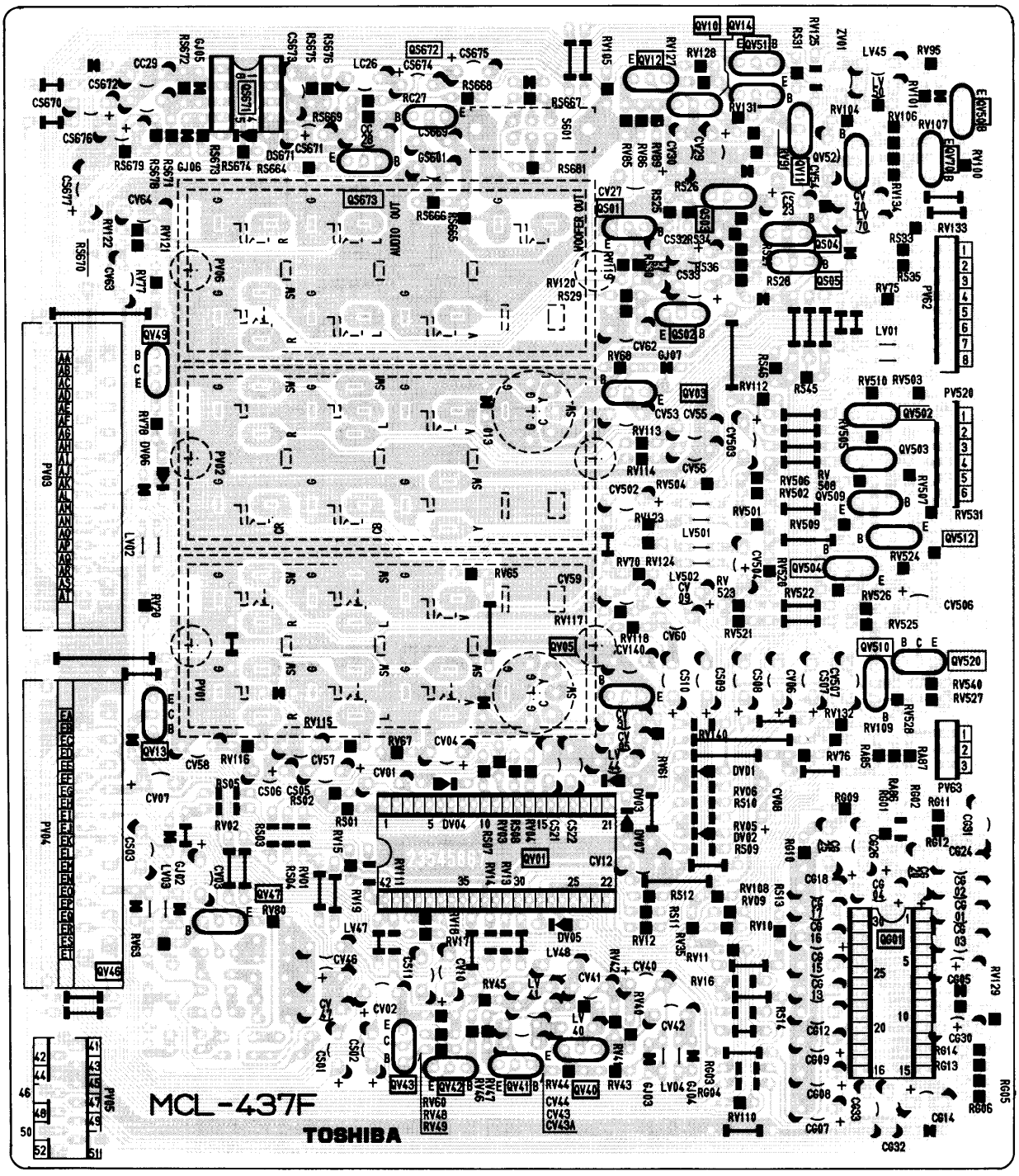

TEXT BOARD PB8468

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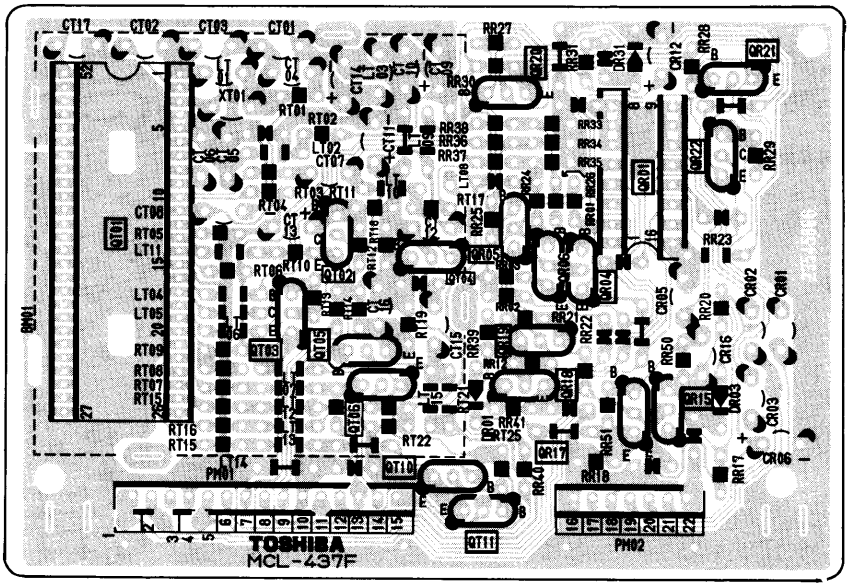

COMB/SECAM BOARD PB7500

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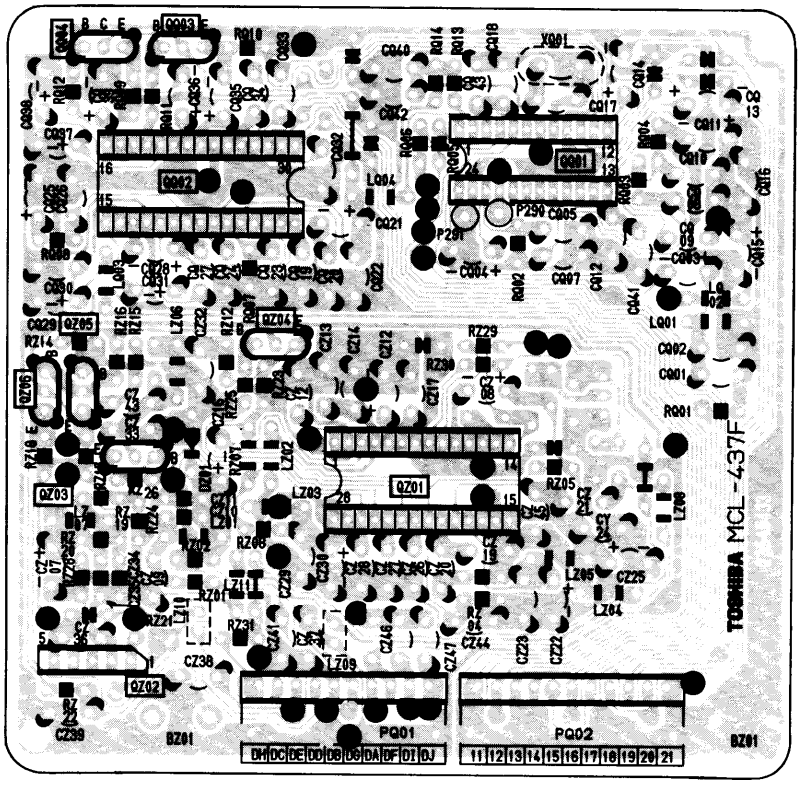
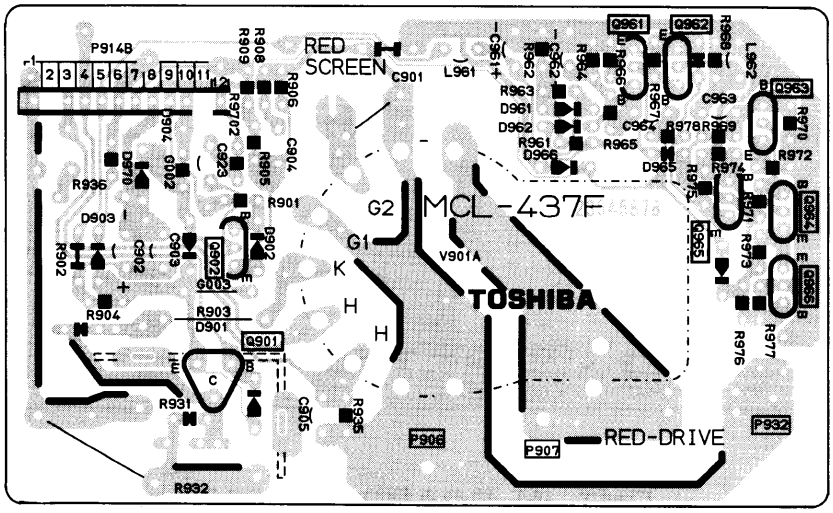


R-DRIVE BOARD PB8501-1

BOTTOM (FOIL) SIDE



G-DRIVE BOARD PB8501-2

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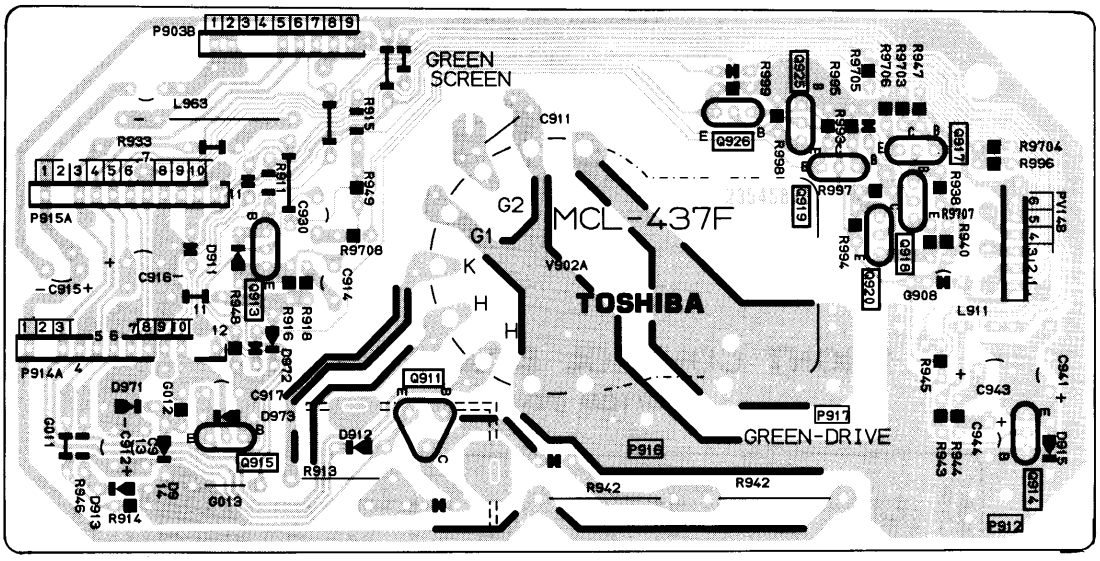
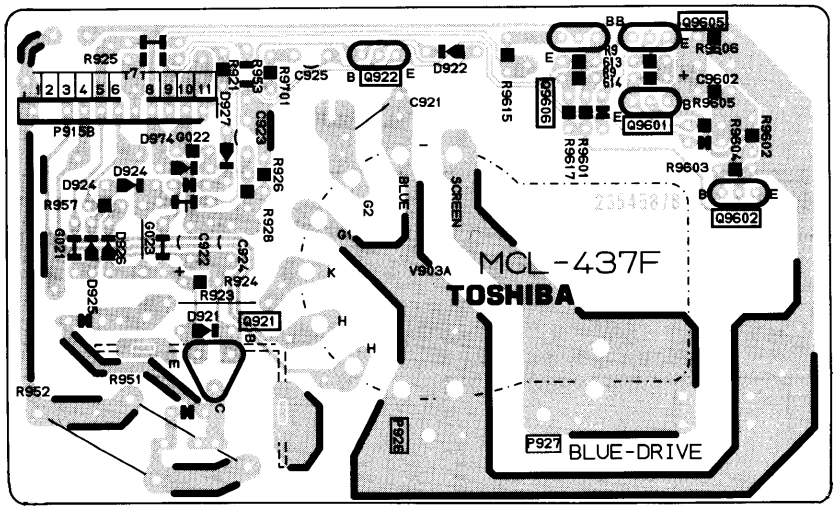


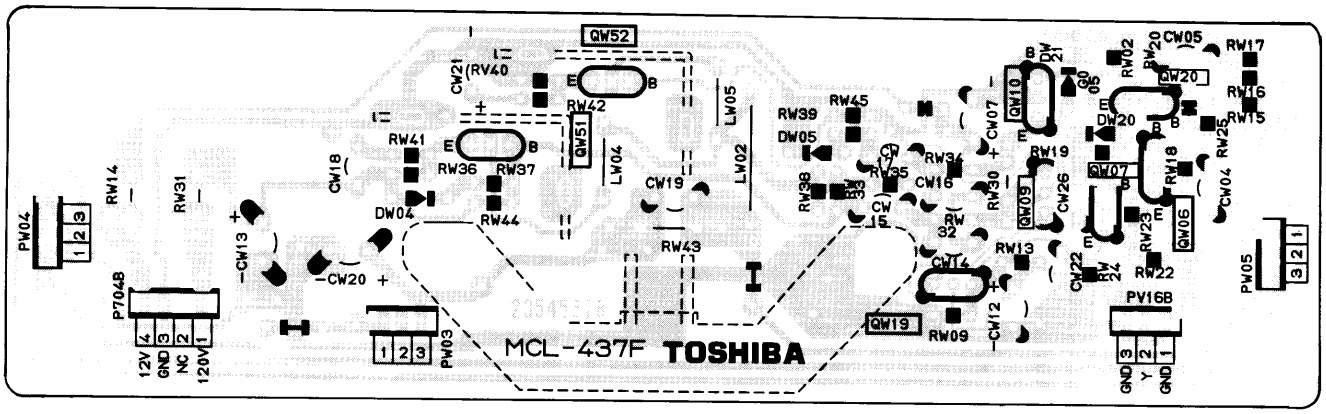
B-DRIVE BOARD PB8501-3

BOTTOM (FOIL) SIDE



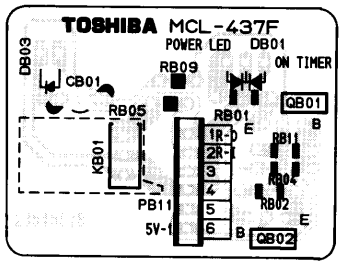
SVM BOARD PB8501-4

BOTTOM (FOIL) SIDE



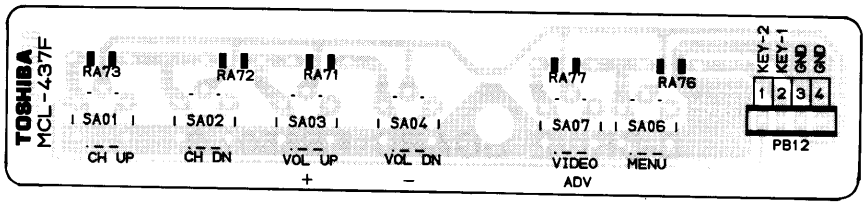
RMT IN BOARD PB8501-5

BOTTOM (FOIL) SIDE



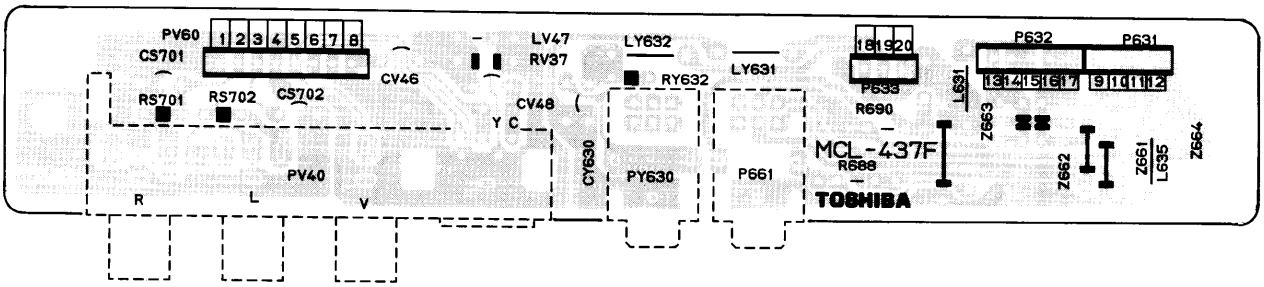
FRONT CONTROL BOARD PB8501-6

BOTTOM (FOIL) SIDE



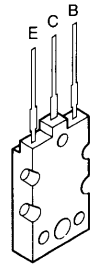
FRONT IN BOARD PB8501-7

BOTTOM (FOIL) SIDE

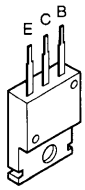


TERMINAL VIEW OF TRANSISTORS

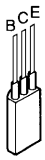
① 2SD2253
(old)
2SC5243



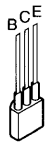
② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



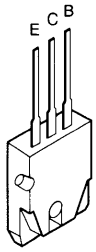
③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



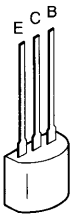
④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



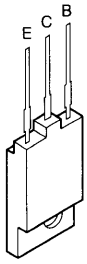
⑤ 2SA1788



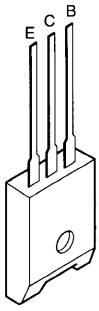
⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201



⑦ 2SD1554
2SD2253
2SD1556
2SC5143
2SD2553



⑧ ON4409



SPECIFICATION

MODEL		61G9UXE/ 61G9UXH 61G9UXM/ 61G9UXA	50G9UXE/ 50G9UXH 50G9UXM/ 50G9UXA
Rated voltage		AC 110 V – 240 V, 50/60 Hz	
Power consumption (at AC 220 V, 50 Hz)		220W	220W
Dimensions (Width × Height × Depth)		1310 mm × 620 mm × 1452 mm	1086 mm × 529 mm × 1282 mm
Mass		116.5 kg	86 kg
Screen size		Type 61 (154 cm)	Type 50 (126 cm)
Television system (Aerial input)	Channel coverage	**System** **Channel** **VHF** **UHF** **CATV** PAL B/G CCIR 2 – 12 21 – 69 X ~ Z+2, S1 ~ S41 PAL I UK — 21 – 69 — PAL D/K CHINA 1 – 12 13 – 57 Z–1 ~ Z–38 SECAM B/G CCIR 2 – 12 21 – 69 X ~ Z+2, S1 ~ S41 SECAM D/K OIRT 1 – 12 21 – 69 X1 ~ X19 NTSC M US 2 – 13 14 – 69 A–6 ~ A–1, A ~ W, AA ~ ZZ, AAA, BBB NTSC M JAPAN 1 – 12 13 – 62 M1 ~ M10, S1 ~ S41	
	Special RF signal	**Colour system** **Sound system** 4.43NTSC 5.5/6.0/6.5 MHz PAL 60Hz 5.5/6.0/6.5 MHz	
Colour system		PAL/SECAM/4.43NTSC/3.58NTSC	
Sound output		14 W + 14 W	
Accessories		• Remote controller unit ×1 • Battery (R03, AAA) ×2 • Caster trays ×4	

* Please refer to owner's manual in detail.